



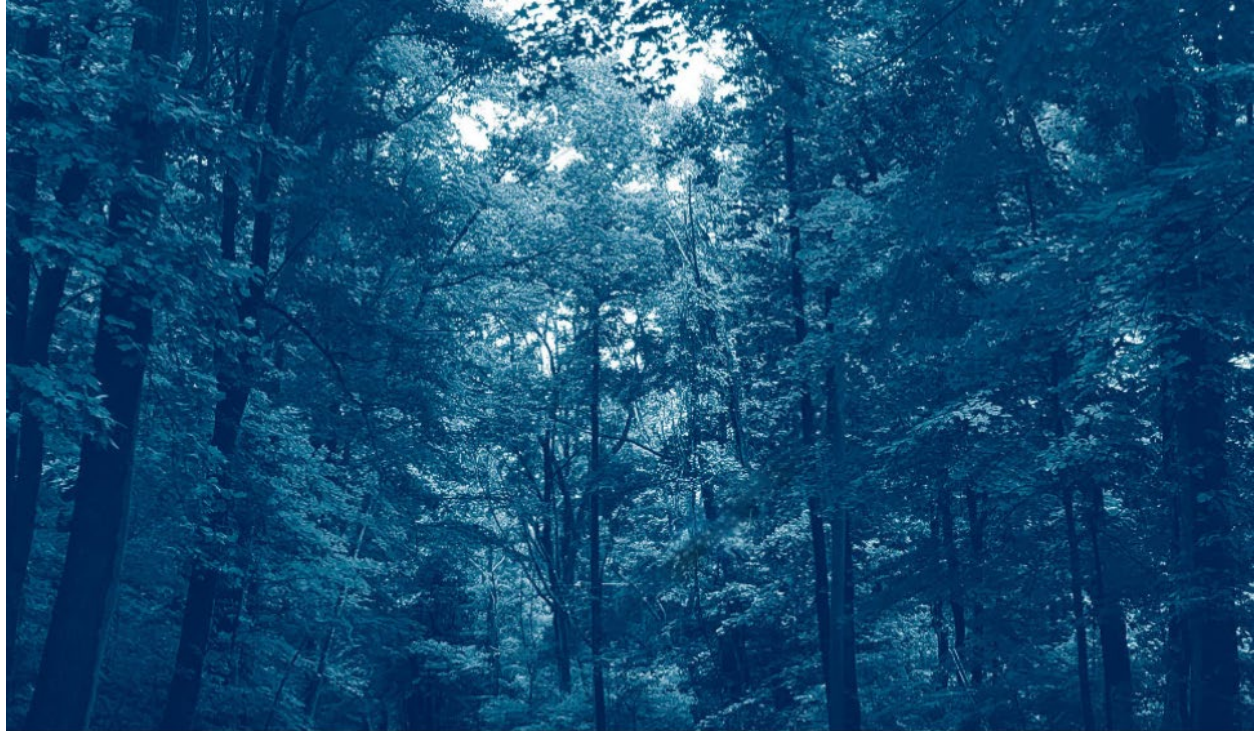
Lehigh Valley Planning Commission

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LEHIGH VALLEY GREENHOUSE GAS ASSESSMENT

Lehigh Valley Greenhouse Gas Emissions Will Rise Without Dramatic Action

Climate change has already led the Lehigh Valley to more rain, more flooding, more heat and more health risks, and the greenhouse gas emissions helping to cause those side effects will continue to increase, unless the Region takes decisive action to reduce them.

A Lehigh Valley Gas Assessment shows that the Region is emitting 9.8 million metric tons of carbon dioxide equivalent (CO₂e) of heat-trapping gases, and that will grow to more than 10 million CO₂e by 2050, unless a collective effort is undertaken by municipalities, businesses and residents to reduce emissions in every facet of life.

The Regional Greenhouse Gas Assessment, performed by the LVPC in partnership with Pennsylvania Department of Environmental Protection (PADEP), Moravian College and the International Council for Local Environmental Initiatives (ICLEI), sets the stage for a Lehigh Valley Climate Action Plan to be developed and released in 2024.

The assessment inventories emissions by the sectors of Industrial Electricity & Natural Gas, Transportation & Mobile Sources, Residential Energy, Commercial Energy, Solid Waste, and Water & Wastewater. The inventory, performed as part of PADEP's Local Climate Action Program, then projects a "business as usual" scenario showing how much emissions would grow if communities don't take action to reduce them.

"As a Region that is growing in population and employment, we also face increases in harmful greenhouse gas emissions, unless we take steps now to reduce them," said LVPC Executive Director Becky Bradley. "This assessment provides the basis for a regionwide Climate Action Plan that will set clear goals as well as policies and actions designed to get us there."

According to the Pennsylvania Climate Impacts Assessment 2021, climate change poses a growing threat to nearly every aspect of life in the Commonwealth and Lehigh Valley, and the impacts are expected to increase in severity. Increasing temperatures, flooding and more extreme rainfall and heat events are projected to occur, affecting everything from human health, agriculture, infrastructure, recreation, environment and the economy.

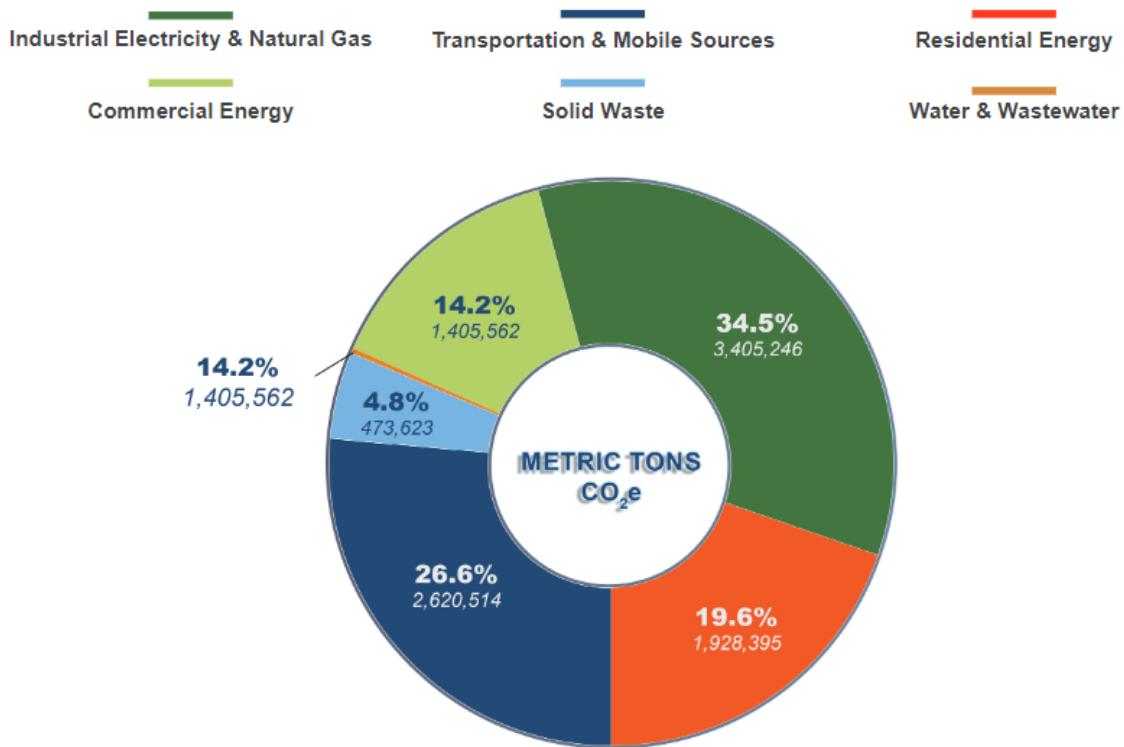
Pennsylvania's Local Climate Action Program aligns with international goals to limit global warming to below 1.5°C (2.7°F). The inventory shows that the Lehigh Valley's strength would also be its challenge because its projected population and economic growth – two major factors in the inventory analysis -- over the next 30 years also means more emissions unless new policies and action are adopted to reduce them.

Overall, LVPC projects the Region will add roughly 100,000 more residents and more than 74,000 jobs by 2050. So, even as global climate activists are trying to get nations around the world to net zero by 2050, the Lehigh Valley's emissions would be growing.

"Keep in mind that the inventory captures most but certainly not all of the greenhouse gas emissions in the Lehigh Valley," said Julie Benco, the LVPC Regional Planner who co-authored the report. "That means that we are emitting more than we think we are now and into the future, which only emphasizes the importance of acting on climate change now and taking steps to cut down emissions immediately."

Using a model set by the International Council for Local Environmental Initiatives (ICLEI), the assessment shows that 14.6 metric tons of CO₂e is released for every resident in the Region. Of the 9.86 metric tons of CO₂e released overall, more than 60% come from the Industrial Electricity & Natural Gas, and Transportation & Mobile Sources sectors. Those figures suggest the Lehigh Valley emits about 3.7% of Pennsylvania's total greenhouse gas emissions.

Greenhouse Gas Emissions by Sector



Perhaps most challenging is that the Region's overall emissions are projected to grow, even though emissions in the transportation sector are forecast to decrease by 33%, because Federal Average Fuel Economy Standards (CAFE) require reduced consumption by cars and trucks. Those mandates were baked into the Lehigh Valley assessment formulas.

While the assessment is the latest step in a long-term to bring about a net zero future for the Lehigh Valley, it is not the first step. The LVPC and its sister organization the Lehigh Valley Transportation Study have for decades promoted smart growth, natural resources protection, green infrastructure, the preservation of open space and improved air quality to reinforce climate change mitigation and adaptation. Their most recent plans and analysis include the 2014 *Climate + Energy Element* that provided an overview of climate change and energy use in the Valley, the groundbreaking 2014 *Return on Environment* report that estimated the economic value of protecting open space and natural resources, the 2017 *Green Infrastructure Guidelines* that give communities a playbook for greener development, the 2018 *Lehigh Valley Hazard Mitigation Plan*, the 2020 *Walk/RollLV* that serves as the Lehigh Valley's first-ever bicycle and pedestrian masterplan, and the 2019 *FutureLV: The Region Plan* that sets a 25-year blueprint for managing the region's growth. Together, along with Livable Landscapes recreation and open space plans for Lehigh and Northampton counties, they contain more than 500 goals, policies, actions and strategies that address climate change.

With the emissions inventory complete, the next step in the coming months is to develop a climate action plan for the Region to follow. The Lehigh Valley Climate Action Plan will establish emission reduction targets for the region, with a goal of helping to limit global warming to below 1.5°C (2.7°F). An assessment of the region's vulnerabilities to climate change will be completed to identify assets or resources that may be most at risk, and climate action goals, objectives and measures will be developed. A draft climate action plan will be prepared and released for public comment. Public input will be incorporated into the Climate Action Plan and anticipated to be published in 2024.

That all will start later this year. To get involved, visit lvpc.org for updates on public meetings and climate action planning or call 610-264-4544.