

The Valley Pathways Study

A landmark study to assess carbon emission levels across major economic sectors and identify opportunities for achieving a clean, sustainable future for the Tennessee Valley region.

Working Together to Build a Competitive, Clean Economy

The University of Tennessee Baker School of Public Policy & Public Affairs and the Tennessee Valley Authority launched the Valley Pathways Study in February 2023 to evaluate the existing environmental landscape and explore opportunities to reduce carbon emissions and create a competitive, sustainable

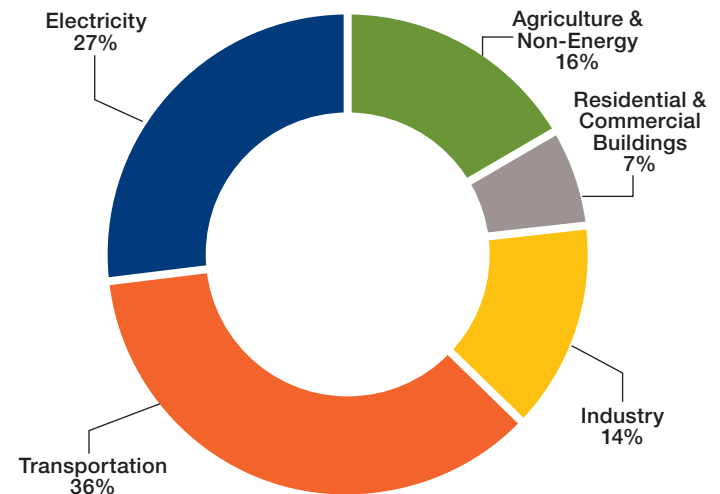
economy. The study brought together 24 participants from multiple sectors, including transportation, agriculture, industry, municipalities, state agencies, academia and others. Participants shared their perspectives and ideas for how we can work together to achieve net-zero emissions for future generations.

Key Findings

The study defined commonly agreed upon facts for causes of greenhouse gas emissions and examined what it would truly take to get to net-zero by 2050. The study found that partnerships across all sectors of the economy will be crucial to success. Every sector has an impact. Working together, we identified these key insights:

- The region is home to about 3 percent of the U.S. population, which corresponds to 3 percent of emissions in the U.S.
- Consistent with national data, the transportation sector is the largest source of emissions in the region.
- Electricity generation produces approximately 27 percent of emissions.
- Buildings and industry emissions include only non-electricity emissions (such as furnaces and industrial processes) but use nearly 100% of electricity generated in the Valley.

Current Emissions Data Across Economic Sectors 200 Million Metric Tonnes of CO₂e



Tennessee Valley 2019 Greenhouse Gas Emissions (estimated). Commissioned by TVA and UTK Baker School. Prepared by Guidehouse and VEIC. Draft, November 2023.

What's Next?

The Baker School will host the study's initial findings and will be available to answer questions about the study. Learn more at baker.utk.edu.

The Baker School and TVA plan to work with communities across the region to expand existing efforts and leverage new opportunities by:

- Finding opportunities to increase energy efficiency with technologies such as high-efficiency heat pumps, LED lighting, and weatherization.
- Supporting every facet of a clean energy economy, from workforce training to research and development.
- Investing in low-carbon fuels to unlock emission reductions across sectors.
- Pursuing electrification in major sectors like transportation.
- Creating 2050-ready communities through integrated planning to drive sustainable growth.