Appendix C: GHG Projections Technical Support Document

Business As Usual Projections Methodologies

The BAU emission projections for the Atlanta MSA were developed by Georgia Tech, using the RMI Energy Policy Simulator (EPS) model framework, drawing specifically on the Federal Policy Repeal and Rollback scenario.[i] This scenario was selected by the research project team as the most likely future trajectory for both the U.S. and Georgia, reflecting the potential rollback or repeal of key provisions of the Inflation Reduction Act (IRA) and associated EPA rules.[ii] The Repeal and Rollback scenario removes or scales back federal incentives and standards related to clean vehicles, electricity generation, carbon capture, and methane emissions. Additional details on the assumptions underlying this scenario are documented in the EPS repeal scenario technical documentation.[iii] The Atlanta MSA BAU projection is based on a downscaled EPS Georgia statewide scenario. Details about how the downscaling was achieved can be found below.

Geographic Downscaling

The Atlanta MSA BAU projection is based on the EPS Georgia statewide scenario and was downscaled using the following procedure:

1. Two EPS datasets for Georgia were obtained — one including forestry and land-use removals, and one excluding them.
2. Statewide emissions excluding forestry were downscaled to the 29-county Atlanta MSA using the most recent county-level population projections published by the Georgia Office of Planning and Budget (OPB).[iv]
3. Forestry and land-use removals were estimated using the Drawdown Georgia GHG Emissions tracker.[v] In 2024, the MSA accounted for approximately 10% of statewide removals, a share that has remained stable historically. Accordingly, future MSA removals were calculated as 10% of statewide EPS removals.

This approach ensures that the MSA's BAU projections remain consistent with statewide trajectories while incorporating locally relevant demographic and land-use factors.

Key Assumptions and Data Basis

The EPS Federal Policy Repeal and Rollback scenario assumes changes to the following major clean energy and climate-related provisions of the IRA and associated EPA rules:

- IRA sections
  - 30D passenger vehicle tax credits
  - 45W commercial vehicle tax credits
  - 45Y/48E tax credits for clean electricity
  - 45U zero-emission nuclear power production tax credit
  - 45Q tax credits for carbon capture and sequestration
  - 45X advanced manufacturing production tax credit
  - 45V clean hydrogen production tax credit
  - 30C alternative fuel vehicle refueling property tax credit
  - Agricultural conservation investments and conservation technical assistance (included in national model, not in state models)
  - Forest system restoration and forestry conservation programs (included in national model, not in state models)
- EPA rules
  - 111 Clean Air Act rules, Mercury and Air Toxics standards, and Steam Electric Power Generating Effluent Guidelines for power plants
  - Tailpipe emission standards for light-, medium-, and heavy-duty vehicles (model years 2027 and later)
  - Methane emission rules for oil and natural gas operations

These assumptions reflect a more limited policy environment for emissions reductions relative to prior federal commitments and therefore represent a conservative baseline against which future regional reduction measures are evaluated.

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[i] "Energy Policy Simulator Documentation", Energy Innovation LLC, Accessed September 15, 2025, https://docs.energypolicy.solutions/
[ii] "Inflation Reduction Act of 2022", Public Law 117-169, August 16, 2022, https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf
[iii] "EPS Federal Policy Repeal and Rollback Scenario Guide", Energy Innovation LLC, April 21, 2025, https://docs.energypolicy.solutions/repeal-documentation#modeled-scenario
[iv] "2025 Population Projections Data", Governer's Office of Planning and Budget, Accessed September 15, https://opb.georgia.gov/census-data/population-projections
[v] "Forest Uptake for Month per 1,000 People (in Metric Tons)", Drawdown Georgia Emissions Tracker, Accessed September 15, 2025, https://www.drawdownga.org/climate-solutions-trackers-and-tools/ghg-emissions-tracker/#county-tracker