

- Energy Production Leadership: Pennsylvania's energy production prowess is undeniable, as it stands as the second-largest producer of total energy in the United States. This includes significant contributions to natural gas, nuclear power, and coal production, underscoring the state's diverse energy portfolio.
- Industrial and Manufacturing Strength: The state's robust energy resources play a pivotal role in sustaining its expansive industrial and manufacturing economy, which ranks as the sixth-largest in the nation. Pennsylvania's energy sector is deeply intertwined with its industrial prowess, driving economic growth and job creation.
- Climate Crisis Awareness: Acknowledging the reality of the climate crisis is crucial. Pennsylvania, like many regions, faces the dual challenge of addressing climate change while maintaining economic prosperity. This recognition sets the stage for proactive and strategic action.
- Opportunities for Sustainable Transition: Despite the challenges posed by the climate crisis, there exists a significant opportunity for Pennsylvania to lead in crafting a transition to climate sustainability. This transition can not only mitigate environmental impacts but also foster innovation, job growth, and economic resilience.
- Innovation and Adaptation: Pennsylvania can leverage its rich history of innovation and adaptability to spearhead sustainable solutions. From investing in renewable energy technologies to implementing energy efficiency measures, the state can pave the way for a greener and more sustainable future.
- Collaborative Efforts: Addressing climate change requires
 collaborative efforts across sectors. Pennsylvania can partner with
 government agencies, businesses, academia, and communities to
 develop comprehensive strategies that balance environmental
 stewardship with economic prosperity.
- Equitable and Inclusive Approach: Any transition to climate sustainability must prioritize equity and inclusion, ensuring that all communities benefit from clean energy initiatives and have a voice in the decision-making process. This approach fosters social cohesion and ensures that no one is left behind in the transition.
- Long-Term Vision: Pennsylvania's transition to climate sustainability requires a long-term vision that transcends political cycles and short-term interests. By setting ambitious goals and implementing actionable plans, the state can chart a course towards a more resilient, prosperous, and sustainable future for generations to come.

The Commonwealth of Pennsylvania plays a significant role in contributing to the climate crisis, with its greenhouse gas (GHG) emissions reaching 263.68 million metric tons (MMT) in 2019 (PA DEP, 2023b). The industrial sector is the largest emitter, followed by the electricity and transportation sectors (PA DEP, 2023b). The state's electricity generation is heavily reliant on fossil fuels, with nearly 65% coming from natural gas and coal, while renewable sources like solar and wind account for less than 3% (U.S. EIA, 2023d).

CURRENT CLIMATE POLICIES AND THEIR SHORTCOMINGS

Despite recognizing the climate crisis, Pennsylvania's current measures are insufficient to address its GHG emissions effectively. Key climate policies include:

- 1. Emission Reduction Goals: Executive Order No. 2019–01 aims to reduce state emissions by 26% below 2005 levels by 2025 and 80% below 2005 levels by 2050.
- 2. Alternative Energy Portfolio Standards Act (2007): Mandates that 30% of state electricity must come from Tier 1 clean energy technologies by 2030.
- **3. Incentive-Based Programs:** Voluntary programs to encourage residents to adopt energy-saving and efficiency measures (PA DEP, n.d.e).
- **4. Public Utility Commission Guidelines:** Directives for electric companies to provide energy efficiency programs and rebates (Omnibus Amendments Act, 2008; PA DEP, n.d.e).
- **5. Transit Agency Mandates:** Requires the replacement of 25% of the state's passenger vehicle fleet with electric vehicles by 2025 and encourages exploring other clean energy technologies (EO 2019–01, 2019).

NEED FOR IMPROVED STRATEGIES

The existing policies fall short in addressing the climate crisis comprehensively and lack provisions for creating high-quality union jobs and promoting equitable economic development (Cao et al., 2023). To build a climate-safe, equitable economy, Pennsylvania needs:

- **Science-Based Climate Goals:** Objectives aligned with the latest climate science to ensure effective GHG reduction.
- **Ambitious Industrial Policy:** Policies that support the transition to clean energy while fostering industrial growth.
- **Strong Labor and Equity Standards:** Ensuring the creation of high-quality union jobs and promoting equity in economic development.

Pennsylvania must adopt these comprehensive strategies to mitigate its climate impact and foster a sustainable future for its residents.

Contact: Ramon Becerra | 312-888-6674 | RBecerra@UnionEnergyPA.org | unionenergypa.org/







