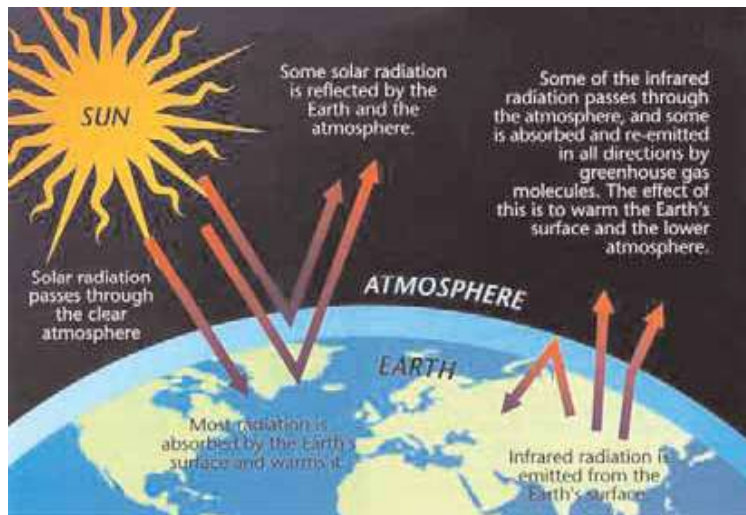


Pennsylvania Department of Environmental Protection  
**Local Government Greenhouse Gas Pilot Program**

2010

Township of Wilkins  
Borough of Forest Hills  
Municipality of Penn Hills  
Center for Environmental Research and Education

Greenhouse gases (GHG) - including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and ozone (O<sub>3</sub>) - essentially trap heat in the atmosphere by absorbing it as it radiates from the earth. While some level of greenhouse gases is essential for maintaining livable temperatures on the planet, excess levels lead to dramatic changes in the earth's climate.



Efforts to reduce GHG emissions are occurring on the international, national, state, and local level. Wilkins Township, along with Penn Hills and Forest Hills are working to inventory their baseline emissions and plan for reductions. This project is funded by a grant from the Pennsylvania Department of Environmental Protection and conducted by graduate students and faculty of the Center for Environmental Research and Education at Duquesne University.

Wilkins Township GHG emissions were estimated using a software program from Clean Air-Climate Protection that converts easily accessible data from utility bills and purchase receipts into units of CO<sub>2</sub>. Once estimates are finished, reduction activities will be recommended according to:

- GHG reduction potential
- Rate of return on investment
- Availability of grants and other low interest loans for implementation

One commonly employed technique for saving money and reducing GHG emissions is replacing the light bulbs in traffic signals and indoor exit signs with LED bulbs that consume far less electricity. This typically has a pay-back period of less than five years and significantly reduces GHG emissions.

Other reduction steps could include incentives for carpooling, home upgrades or other means for individual residents or businesses to reduce energy use.

Input from residents, business owners and other stakeholders will play a critical role in determining recommendations. Please share any ideas or concerns at this meeting, or contact us at [GradAssistCERE@duq.edu](mailto:GradAssistCERE@duq.edu). You may also contact Dr. Stan Kabala, Associate Director of the Center for Environmental Research and Education at [kabala@duq.edu](mailto:kabala@duq.edu) or 412-396-4233.