

U.S. Environmental Protection Agency

2005 GTAP Advisory Board Report

GTAP-related activities ongoing within the US EPA include:

National Center for Environmental Economics, Office of Policy, Economics, and Innovation

- A global CGE model calibrated to GTAP data is being used to explore issues surrounding the coordination of trade and environmental policies in a second best setting. An international tax database more representative of actual government revenue sources is being constructed for this purpose. Model simulations will examine the impact of regional and worldwide trade liberalization scenarios on the environment, the potential use of targeted environmental policies to preempt negative impacts, and the importance of accounting for pre-existing distortions in the analysis.
- A separate effort has been made to interface EPA's Trade and Environmental Assessment Model (TEAM) with the GTAP model. TEAM converts aggregate economic results from the GTAP model into changes at the U.S. county level for almost 1,200 sectors, and reports environmental outcomes for nine pollutant categories covering 1,100 chemicals in water, air, agriculture, and hazardous waste. Model simulations include the worldwide removal of domestic subsidies and global trade liberalization.

Methane and Sequestration Branch, Office of Atmospheric Programs

- The Methane and Sequestration Branch continues to sponsor a special three-year project with GTAP. The objective of the project is to develop 1) a global land use database by agro-ecological zone, 2) an associated greenhouse gas emissions database (including non-CO₂ emissions), and 3) a simple, comparative static model to illustrate how these databases can be incorporated into a CGE framework for integrated assessment modeling.