

**MIT Joint Program on the Science and Policy of Global Change  
Massachusetts Institute of Technology, Cambridge, USA**

**<http://globalchange.mit.edu>**

**GTAP-related activities, 2011**

The MIT Joint Program on the Science and Policy of Global Change made extensive use of the GTAP data set for research and analysis conducted in the program over the past year (see the following publication list). GTAP data serves as the principal economic data for the Program's Emissions Prediction and Policy Analysis (EPPA) Model, a global CGE model of the world economy with details on the energy sector and on emissions of greenhouse gases and other air pollutants. The EPPA model was used for variety of applications.

**2011 AND 2012 PUBLICATIONS USING GTAP (AS OF MAY 2012)**

Paltsev, S., J. Morris, Y. Cai, V. Karplus and H. Jacoby, 2012, "The Role of China in Mitigating Climate Change," *Energy Economics*, (in press).

Morris, J., S. Paltsev, and J. Reilly, 2012, "Marginal Abatement Costs and Marginal Welfare Costs for Greenhouse Gas Emissions Reductions: Results from the EPPA Model," *Environmental Modeling and Assessment*, (in press).

Winchester, N., C. Wollersheim, R. Clewlow, N. Jost, S. Paltsev, J. Reilly, I. Waitz, 2012, "The Impact of Climate Policy on U.S. Aviation," *Journal of Transport Economics and Policy*, (in press).

Reilly, J., J. Melillo, Y. Cai, D. Kicklighter, A. Gurgel, S. Paltsev, T. Cronin, A. Sokolov, and A. Schlosser, 2012, "Using Land to Mitigate Climate Change: Hitting the Target, Recognizing the Tradeoffs," *Environmental Science and Technology*, 46(11), 5672-5679.

Webster, M., A. Sokolov, J. Reilly, C. Forest, S. Paltsev, A. Schlosser, C. Wang, D. Kicklighter, M. Sarofim, J. Melillo, R. Prinn, and H. Jacoby, 2012, "Analysis of Climate Policy Targets under Uncertainty," *Climatic Change*, 112(3-4), 569-583.

Matus, K., K.-M. Nam, N. Selin, L. Lamsal, J. Reilly, and S. Paltsev, 2012, "Health Damages from Air Pollution in China," *Global Environmental Change*, 22(1), 55-66.

Malina, R., D. McConnachie, N. Winchester, C. Wollersheim, S. Paltsev, and I. Waitz, 2012, "The Impact of the European Union Emissions Trading Scheme on U.S. Aviation," *Journal of Air Transport Management*, 2012, 19, 36-41.

Jacoby, H., F. O'Sullivan, and S. Paltsev, 2012, "The Influence of Shale Gas on U.S. Energy and Environmental Policy," *Economics of Energy and Environmental Policy*, 1(1), 37-51.

Gitiaux, X., S. Rausch, S. Paltsev, and J. Reilly, 2012, "Biofuels, Climate Policy, and the European Vehicle Fleet," *Journal of Transport Economics and Policy*, 2012, 46(1), 1-23.

Paltsev, S., H. Jacoby, J. Reilly, Q. Ejaz, F. O'Sullivan, J. Morris, S. Rausch, N. Winchester, and O. Kragha, 2011, "The Future of U.S. Natural Gas Production, Use, and Trade," *Energy Policy*, 39(9), 5309-5321.

Gurgel, A., T. Cronin, J. Reilly, S. Paltsev, D. Kicklighter, and J. Melillo, 2011, "Food, Fuel, Forests, and the Pricing of Ecosystem Services," *American Journal of Agricultural Economics*, 93(2), 342-348.

Zaks, D., N. Winchester, C. Kucharik, C. Barford, S. Paltsev, and J. Reilly, 2011, "Contribution of Anaerobic Digesters to Emissions Mitigation and Electricity Generation Under U.S. Climate Policy," *Environmental Science and Technology*, 45(16), 6735-6742.

Chen, Y.-H., J. Reilly and S. Paltsev, 2011, "The Prospects for Coal-To-Liquid Conversion: A General Equilibrium Analysis," *Energy Policy*, 39(9), 4713-4725.

Gavard, C., N. Winchester, H. Jacoby, and S. Paltsev, 2011, "What to Expect from Sectoral Trading: a U.S.-China Example," *Climate Change Economics*, 2(1), 9-26.

Gurgel, A., S. Paltsev, J. Reilly, and G. Metcalf, 2011, "An Analysis of U.S. Greenhouse Gas Cap-and-Trade Proposals using a Forward-Looking Economic Model," *Environment and Development Economics*, 16(2), 155-176.

Winchester, N., S. Paltsev, and J. Reilly, 2011, "Will Border Carbon Adjustments Work?" *The B.E. Journal of Economic Analysis and Policy*, 11(1), Article 7, 1-27.

Prinn, R., S. Paltsev, A. Sokolov, M. Sarofim, J. Reilly, and H. Jacoby, 2011, "Scenarios with MIT Integrated Global Systems Model: Significant Global Warming Regardless of Different Approaches," *Climatic Change*, 104(3-4), 515-537.