

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

<http://globalchange.mit.edu>

GTAP-related activities, 2012

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.

2012 AND 2013 PUBLICATIONS USING GTAP (AS OF MAY 2013)

Reilly, J., S. Paltsev, K. Strzepek, N.E. Selin, Y. Cai, K.-M. Nam, E. Monier, S. Dutkiewicz, J. Scott, M. Webster, and A. Sokolov, 2013, "Valuing climate impacts in integrated assessment models: the MIT IGSM," *Climatic Change*, 117(3), 561-573.

Jacoby, H. and S. Paltsev, 2013, "Nuclear exit, the US energy mix, and carbon dioxide emissions," *Bulletin of the Atomic Scientists*, 69(2), 34-43.

Karplus, V., S. Paltsev, M. Babiker, and J. Reilly, 2013, "Should a vehicle fuel economy standard be combined with an economy-wide greenhouse gas emissions constraint? Implications for energy and climate policy in the United States," *Energy Economics*, 36, 322-333.

Karplus, V., S. Paltsev, M. Babiker, and J. Reilly, 2013, "Applying engineering and fleet detail to represent passenger vehicle transport in a computable general equilibrium model," *Economic Modelling*, 30, 295-305.

Winchester, N., C. Wollersheim, R. Clewlow, N. Jost, S. Paltsev, J. Reilly, and I. Waitz, 2013, "The Impact of Climate Policy on U.S. Aviation," *Journal of Transport Economics and Policy*, 47(1), 1-15.

Paltsev, S., J. Morris, Y. Cai, V. Karplus, and H. Jacoby, 2012, "The Role of China in Mitigating Climate Change," *Energy Economics*, 34(S3), S444-S450.

Karplus, V. and S. Paltsev, 2012, "Proposed Vehicle Fuel Economy Standards in the United States for 2017 to 2025: Impacts on the Economy, Energy, and Greenhouse Gas Emissions," *Transportation Research Record*, 2287, 132-139.

Chan, G., J. Reilly, S. Paltsev, and Y.-H. Chen, 2012, "The Canadian Oil Sands Industry Under Carbon Constraints," *Energy Policy*, 50, 540-550.

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*, 17(4), 325-336.

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.