

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

<http://globalchange.mit.edu>

**GTAP-related activities, 2016**

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 Economic Projection 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.

**2016 AND 2017 PUBLICATIONS BY MIT JOINT PROGRAM USING GTAP (AS OF MAY 2017)**

*Journal Publications:*

Paltsev, S., Y-H. Chen, V. Karplus, P. Kishimoto, J. Reilly, A. Loeschel, K. von Graevenitz, and S. Koesler, 2017, "Reducing CO<sub>2</sub> from cars in the European Union," *Transportation*, in press.

Winchester, N. and K. Ledvina, 2017, "The Impact of Oil Prices on Bioenergy, Emissions and Land Use," *Energy Economics*, 65, 219-227.

Ramberg, D., Y-H. Chen, S. Paltsev, and J. Parsons, 2017, "The economic viability of Gas-to-Liquids technology and the crude oil-natural gas price relationship," *Energy Economics*, 63, 13-21.

Zhang, D. and S. Paltsev, 2016, "The Future of Natural Gas in China: Effects of Pricing Reform and Climate Policy," *Climate Change Economics*, 7 (4), 1650012, 1-32.

Gavard, C., N. Winchester, and S. Paltsev, 2016, "Limited trading of emissions permits as a climate cooperation mechanism? US-China and EU-China examples," *Energy Economics*, 58, 95-104.

Chen, Y-H., S. Paltsev, J. Reilly, J. Morris and M. Babiker, 2016, "Long-term Economic Modeling for Climate Change Assessment," *Economic Modeling*, 52, 867-883.

Octaviano, C., S. Paltsev, and A. Gurgel, 2016, “Climate change policy in Brazil and Mexico: Results from the MIT EPPA model,” *Energy Economics*, 56, 600-614.

Van Ruijven, B., K. Daenzer, K. Fihser-Vanden, T. Kober, S. Paltsev, R. Beach, S. Calderon, K. Calvin, M. Labriet, A. Kitous, A. Lucena, and D. van Vuuren, 2016, “Baseline projections for Latin America: base-year assumptions, key drivers and greenhouse emissions,” *Energy Economics*, 56, 498-511.

Lucena, A.F.P., L. Clarke, R. Schaeffer, A. Szklo, P.R.R. Rochedo, L.P.P. Nogueira, K. Daenzer, A. Gurgel, A. Kitous and T. Kober, 2016, “Climate policy scenarios in Brazil: A multi-model comparison for energy,” *Energy Economics*, 56, 564-574.

Veysey, J., C. Octaviano, K. Calvin, S. Herreras Martinez, A. Kitous, J. McFarland and B. van der Zwaan, 2016, “Pathways to Mexico’s climate change mitigation targets: A multi-model analysis,” *Energy Economics*, 56, 587–599.

Qi, T., N. Winchester, D. Zhang and X. Zhang, 2016, “An analysis of China’s climate policy using the China-in-Global Energy Model,” *Economic Modeling*, 52, 650-660.

#### *MIT Joint Program Reports:*

Sokolov, A., S. Paltsev, H. Chen, M. Haigh, R. Prinn and E. Monier, 2017, Climate Stabilization at 2°C and Net Zero Carbon Emissions. MIT Joint Program Report 309, Cambridge MA.

<https://globalchange.mit.edu/publication/16629>

Jacoby, H.D., Y.-H.H.Chen and B.P. Flannery, 2017, Transparency in the Paris Agreement. MIT Joint Program Report 308, Cambridge MA.

<https://globalchange.mit.edu/publication/16547>

Winchester, N., K. Ledvina, K. Strzepek and J.M. Reilly, 2016, The Impact of Water Scarcity on Food, Bioenergy and Deforestation. MIT Joint Program Report 300, Cambridge MA.

<https://globalchange.mit.edu/publication/16280>

Ejaz, Q., S. Paltsev, D. Kicklighter and N. Winchester, 2016, Are Land-use Emissions Scalable with Increasing Corn Ethanol Mandates in the United States? MIT Joint Program Report 295, Cambridge MA.

<https://globalchange.mit.edu/publication/16169>

Zhang, D. and S. Paltsev, 2016, The Future of Natural Gas in China: Effects of Pricing Reform and Climate Policy, MIT Joint Program Report 294, Cambridge MA.

<https://globalchange.mit.edu/publication/16334>

Chen, Y.-H.H., M. Babiker, S. Paltsev and J. Reilly, 2016, Costs of Climate Mitigation Policies, MIT Joint Program Report 292, Cambridge MA.  
<https://globalchange.mit.edu/publication/15766>

Paltsev, S., A. Sokolov, H. Chen, X. Gao, A. Schlosser, E. Monier, C. Fant, J. Scott, Q. Ejaz, E. Couzo, R. Prinn and M. Haigh, 2016, Scenarios of Global Change: Integrated Assessment of Climate Impacts, MIT Joint Program Report 291, Cambridge MA.  
<https://globalchange.mit.edu/publication/16255>