SERGEY PALTSEV

77, Massachusetts Ave., E19-429F Massachusetts Institute of Technology Cambridge, MA 02139 USA

E-mail: paltsev@mit.edu Phone: 617-253-0514 Fax: 617-253-9845

Webpage: http://web.mit.edu/paltsev/www

Employment:

• Assistant Director for Economic Research (since 2011), Principal Research Scientist (since 2008), Research Scientist in Economics, MIT Energy Initiative, MIT Joint Program on the Science and Policy of Global Change, Massachusetts Institute of Technology, Cambridge, MA, 2002-present.

Work on the economics and policy of climate change, with particular responsibility for sustenance, development, and policy application of the MIT Emission Prediction and Policy Analysis (EPPA) model.

• Consultant, The World Bank, Washington DC, 2001, 2002.

An assignment with the VP Development Economics and Chief Economist (DEC). Developing the services CGE model for the Russian Federation. Working on the Trade and Poverty in the Least Developed Countries Project.

• Instructor, Research Assistant, Teaching Assistant, Department of Economics, The University of Colorado, Boulder, CO, 1994-1995, 1997-2002.

Teaching courses in microeconomics, international finance, economic forecasting, and macroeconomics. Research sponsored by the U.S. Department of Energy on creating a global economic-energy dataset, GTAP-EG, and quantitative assessment of carbon leakage based on the Kyoto Protocol goals.

• Visiting Instructor, The Economics Institute, Boulder, CO, 1994-1995, 1999-2001.

Teaching courses in microeconomics and a seminar on a transition to a market economy to students preparing for graduate study in USA. Directing the symposium on transitional economies for senior government officials from the Central Asian Republics of the former USSR.

• Actuarial Modeling Expert, International Management and Communications Corporation (IMCC), Arlington, VA, 1998-1999.

Working on USAID-funded worldwide study on Pension System Issues and Their Relation to Economic Growth. The objectives of this project are to develop for USAID and for national governments contemplating pension system reform a compact overview and assessment of alternative approaches to such reform and of their likely effects upon economic growth and the social security of the population. Analyzing the population dynamics and the projection of demand for pension benefits over periods ranging until 2075 for a selection of developing and transition economies on the assumption that existing PAYGO systems will be retained.

Consultant, The World Bank, Washington DC, 1999.

Creating a core computable general equilibrium model for Russia based on the Goskomstat inputoutput table. Assessing marginal excess burdens of indirect taxes. Developing an internet-based CGI environment for remote access to GAMS-MPSGE models.

• Executive Director, Masters Program in Economics and Management of Technology in Belarus, The Economics Institute, Boulder, CO, 1995-1997.

Directing the Economics Institute's Masters Program in Economics and Management of Technology at Belarusian State University, Minsk, Belarus. The program was a joint U.S. – Belarus pilot project sponsored by the U.S. Agency for International Development through The Eurasia Foundation. Creation and registration of the entity with Belarusian authorities, teaching, and day-to-day management of the program. The program has now been transformed into the School of Business and Management of Technology at Belarusian State University.

• Scientist, Belarusian State University, Minsk, Belarus, 1990-1993.

Research sponsored by the Belarus Fund of Fundamental Investigations on correlation analysis of random flows of signals.

• Engineer-Designer, Brest Computer Production Amalgamation, Brest, Belarus, 1989-1990.

Designing of specialized computer hardware. Supervision of production process.

Education:

- University of Colorado, Boulder, USA, PhD, Economics, 2001.
 Dissertation: General Equilibrium Assessment of Public Policy Issues in the Newly Independent States. Advisor Professor Thomas F. Rutherford
- Belarusian State University, Minsk, Belarus, Diploma, Radiophysics and Electronics, 1989.

Awards:

2012 Pyke Johnson Award (The award by the Transportation Research Board of the National Academies, USA, for the best paper in the area of planning and environment. The award is given for the paper "The Economic, Energy, and GHG Emissions Impacts of Proposed 2017-2025 Vehicle Fuel Economy Standards in the United States", with V. Karplus).

Best Policy Analysis Paper of 2012, Environmental Science and Technology Journal, American Chemical Society (For the paper "Using Land To Mitigate Climate Change: Hitting the Target, Recognizing the Trade-offs", with J. Reilly, J. Melillo, Y. Cai, D. Kicklighter, A. Gurgel, T. Cronin, A. Sokolov, and A. Schlosser).

Global Trade Analysis Project (GTAP) Research Fellow, 2008-2011.

Best 2004 Research Award, Tokyo Electric Power Company, Japan (with Yasuyuki Endo, Kok Hou Tay, Henry Jacoby, and John Reilly).

Advisory and Consulting Experience:

Lead Author, Fifth Assessment Report (AR5), Working Group III, Intergovernmental Panel on Climate Change (IPCC), 2011-2013.

Advisory Board Member, Global Trade Analysis Project (GTAP), Purdue University, 2006-2013.

Reviewer, European Research Council Executive Agency, EC, 2013.

Reviewer, Natural Gas Development, Alfred P. Sloan Foundation, 2013.

Consultant, Energy-Economic Modeling Frameworks for Climate Policy Analysis, The World Bank, 2012. Review Panel for the Program on the Economics of Climate Change, Germany's Federal Ministry of Education and Research (BMBF), 2010-2011.

Reviewer, Life Cycle Greenhouse Gas Inventory of Natural Gas Extraction, Delivery and Electricity Production, National Energy Technology Laboratory, U.S. Department of Energy, 2011.

Reviewer, Natural Gas and Renewables: A Secure Low Carbon Future Energy Plan for the United States, DB Climate Change Advisors, Deutsche Bank Group, 2010.

Consultant, The Biofuels Market: Current Situation and Alternative Scenarios, United Nations Conference on Trade and Development (UNCTAD), 2007-2008.

Expert Panel on the Economics of Climate Change, U.S. Government Accountability Office (GAO), 2007-2008.

Consultant, Tax Reform and Foreign Trade in Uzbekistan, United Nations Development Programme (UNDP), 2006.

Second Generation Model Advisory Panel, Science Advisory Board, U.S. Environmental Protection Agency (EPA), 2004-2006.

Consultant, Trade and Poverty in the Least Developed Countries, The World Bank. 2001, 2002.

Consultant, Assessment of the Marginal Excess Burden of Taxes in the Russian Economy, The World Bank. 1999.

Consultant, Pension Reform in the Kyrgyz Republic, IMCC for Asian Development Bank. 1998-1999.

Administrative Experience:

Assistant Director for Economic Research at MIT Joint Program on the Science and Policy of Global Change, 2011-persent.

Creating and managing the joint US-Belarus Masters level educational Program in Economics and Management of Technology (PEMT) at Belarusian State University, Minsk, Belarus. The project was sponsored by The United States Agency for International Development through The Eurasia Foundation. 1995-1997.

Teaching Experience:

Instructor:

Global Climate Change: Economics, Science, and Policy (Graduate/Upper Undergraduate Level) - Massachusetts Institute of Technology, Spring 2010 (with Professors Prinn, Reilly, Schlosser, Selin, Strzepek, and Webster).

Principles of Microeconomics (Undergraduate Level) - University of Colorado, Fall 1998, Spring 2002 - The Economics Institute, Fall 1999.

Microeconomic Theory (Upper Undergraduate Level) - University of Colorado, Summer 1998, Summer 2000, Summer 2001 – The Economics Institute, Fall 1999, Spring 2000, Summer 2000, Spring 2001, Summer 2001.

International Finance (Masters level) – University of Colorado, Spring 2001, Spring 2002 (co-teaching with Professor C.M.Becker).

Economic Forecasting (Masters level) – University of Colorado, Spring 2002.

Microeconomics and its Applications (USAID-sponsored course for senior government officials from the former Soviet Union) - The Economics Institute, Fall 1994, Summer 1995.

Microeconomic Theory (Masters Level) - Belarusian State University, Fall 1996 – University of Colorado, Fall 2001.

Seminar on a Transition to a Market Economy (USAID-sponsored course for senior government officials from the former Soviet Union) - The Economics Institute, Summer 1995.

Teaching Assistant:

Principles of Microeconomics - University of Colorado, Spring 1995, Fall 1997, Spring 1998.

Principles of Macroeconomics - University of Colorado, Fall 1994, Fall 1995.

Mathematical Modeling - Belarusian State University, Fall 1992.

Short courses on computable general equilibrium (CGE) modeling:

Economic Modeling of Energy and Environment: Current Approaches and Challenges (February 2009, Center for Economic and Financial Research at New Economic School, Moscow, Russia), 1-day Workshop, Instructor.

Introduction to Computable General Equilibrium Modeling with GAMS and MPSGE (October 2007, Ruhr Graduate School of Economics, University of Duisburg-Essen, Essen, Germany), 5-day Workshop, Instructor (with David Tarr and Volker Clausen).

Introduction to Computable General Equilibrium Modeling with GAMS and MPSGE (December 2006, Institute for Privatization and Management, Minsk, Belarus), 5-day Workshop for Ministry of Economy, National Bank of Belarus, Institute for Privatization and Management, Belarusian State University, and Belarusian State Economic University, Instructor (with David Tarr).

Climate and Energy Policy Applications in CGE Modeling (November 2006, Ruhr Graduate School of Economics, University of Duisburg-Essen, Essen, Germany), 3-day Workshop for Ruhr Graduate School of Economics and RWI Essen, Instructor.

Introduction to Computable General Equilibrium Modeling with GAMS and MPSGE (September 2006, Center for Economic Research, Tashkent, Uzbekistan), 2-day Workshop for Ministry of Economy, Ministry of Finance, Ministry of Foreign Economic Affairs, State Tax Committee, State Statistics Committee, and Center for Economic Research, Instructor (with Miles Light).

Dynamic Modeling with MPSGE (April 2005, Ann Arbor, Michigan, USA), 5-day Workshop, Instructor (with Thomas Rutherford and Laurent Cretegny).

Modeling Economic Equilibrium in a Complementarity Format: An Introduction to GAMS/MCP and GAMS/MPSGE (March 2000, Boulder, Colorado, USA), 4-day Workshop, Teaching Assistant (for Instructors Thomas Rutherford and Richard Cottle).

Publications:

I. Refereed Journal Articles:

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, 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), S444-450.

O'Sullivan, F. and S. Paltsev, 2012, "Shale Gas Production: Potential versus Actual Greenhouse Gas Emissions," *Environmental Research Letters*, 7(044030), 1-6.

Karplus, V. and S. Paltsev, 2012, "The Economic, Energy, and GHG Emissions Impacts of Proposed 2017-2025 Vehicle Fuel Economy Standards in the United States," *Transportation Research Record*, 2287, 132-139.

Chan, G., J. Reilly, S. Paltsev, 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*, 46(1), 1-23.
- Paltsev, S., H. Jacoby, J. Reilly, Q.J. 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 Adjustment 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.
- Winchester, N., S. Paltsev, J. Morris, and J. Reilly, 2010, "Cost of Mitigating Climate Change in the United States," *Annual Review of Resource Economics*, 2, 257-273.
- Karplus, V., S. Paltsev, and J. Reilly, 2010, "Prospects for Plug-in Hybrid Electric Vehicles in the United States and Japan: A General Equilibrium Analysis," *Transportation Research Part A: Policy and Practice*, 44(8), 620-641.

Nam, K.-M., N. Selin, J. Reilly, and S. Paltsev, 2010, "Measuring Welfare Loss Caused by Air Pollution in Europe: A CGE Analysis," *Energy Policy*, 38(9), 5059-5071.

- Rausch, S., G. Metcalf, J. Reilly, and S. Paltsev, 2010, "Distributional Implications of Alternative U.S. Greenhouse Gas Control Measures," *The B.E. Journal of Economic Analysis and Policy*, 10(2), Article 1, 1-44.
- Webster, M., S. Paltsev, and J. Reilly, 2010, "The Hedge Value of International Emissions Trading under Uncertainty," *Energy Policy*, 38(4), 1787-1796.
- Selin, N., S. Wu, K.M. Nam, J. Reilly, S. Paltsev, R. Prinn, and M. Webster, 2009, "Global Health and Economic Impacts of Future Ozone Pollution," *Environmental Research Letters*, 4(044014), 1-9.
- Paltsev, S., J. Reilly, H. Jacoby, and J. Morris, 2009, "The Cost of Climate Policy in the United States," *Energy Economics*, 31(S2), S235-S243.
- Melillo, J., J. Reilly, D. Kicklighter, A. Gurgel, T. Cronin, S. Paltsev, B. Felzer, X. Wang, A. Sokolov, and C.A. Schlosser, 2009, "Indirect Emissions from Biofuels: How Important?" *Science*, 326, 1397-1399.
- Wigley, T., L. Clarke, J. Edmonds, H. Jacoby, S. Paltsev, H. Pitcher, J. Reilly, R. Richels, M. Sarofim, and S. Smith, 2009, "Uncertainties in Climate Stabilization," *Climatic Change*, 97(1-2), 85-121.
- Sandoval, R., V. Karplus, S. Paltsev, and J. Reilly, 2009, "Modeling the Prospects for Hydrogen Powered Transportation through 2100," *Journal of Transport Economics and Policy*, 43(3), 291-316.
- Sokolov, A., P. Stone, C. Forest, R. Prinn, M. Sarofim, M. Webster, S. Paltsev, A. Schlosser, D. Kicklighter, S. Dutkiewicz, J. Reilly, C. Wang, B. Felzer, and H. Jacoby, 2009, "Probabilistic Forecast for 21st Century Climate Based on Uncertainties in Emissions (Without Policy) and Climate Parameters," *Journal of Climate*, 22(19), 5175-5204.
- Babiker, M., A. Gurgel, S. Paltsev, and J. Reilly, 2009, "Forward Looking versus Recursive Dynamic Modeling in Climate Policy Analysis: A Comparison," *Economic Modelling*, 26(6), 1341-1354.
- McFarland, J., S. Paltsev, and H. Jacoby, 2009, "Analysis of the Coal Sector under Carbon Constraints," *Journal of Policy Modeling*, 31(3), 404-424.
- Paltsev, S., J. Reilly, H. Jacoby, A. Gurgel, G. Metcalf, A. Sokolov, and J. Holak, 2008, "Assessment of U.S. GHG Cap-and-Trade Proposals," *Climate Policy*, 8(4), 395-420.
- Van Vuuren, D., M. Meinshausen, G.-K. Plattner, K. Strassmann, S. Smith, T. Wigley, S. Raper, K. Riahi, F. de la Chesnaye, M. den Elzen, J. Fujino, K. Jiang, N. Nakicenovic, S. Paltsev, and J. Reilly, 2008, "Temperature Increase of 21st Century Mitigation Scenarios," *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, 105(40), 15258-15262.
- Webster, M., S. Paltsev, and J. Reilly, 2008, "Autonomous Efficiency Improvement or Income Elasticity of Energy Demand: Does It Matter?" *Energy Economics*, 30(6), p. 2785-2798.
- Matus, K., T. Yang, S. Paltsev, J. Reilly, and K-M. Nam, 2008, "Toward Integrated Assessment of Environmental Change: Air Pollution Health Effects in the USA," *Climatic Change*, 88(1), p. 59-92.
- Gurgel, A., J. Reilly, and S. Paltsev, 2007, "Potential Land Use Implications of a Global Biofuels Industry," *Journal of Agricultural and Food Industrial Organization*, 5(2), Article 9, 1-34.
- Reilly, J., S. Paltsev, B. Felzer, X. Wang, D. Kicklighter, J. Melillo, R. Prinn, M. Sarofim, and C. Wang, 2007, "Global Economic Effects of Changes in Crops, Pasture, and Forests due to Changing Climate, Carbon Dioxide, and Ozone," *Energy Policy*, 35(11), p. 5370-5383.

Kasahara, S., S. Paltsev, J. Reilly, H. Jacoby, and A.D. Ellerman, 2007, "Climate Change Taxes and Energy Efficiency in Japan," *Environmental and Resource Economics*, 37(2), p. 377-410.

Reilly, J., M. Sarofim, S. Paltsev, and R. Prinn, 2006, "The Role of Non-CO2 GHGs in Climate Policy: Analysis Using the MIT IGSM," *Energy Journal*, Multigas Mitigation and Climate Policy Special Issue, p. 503-520.

Jacoby, H., J. Reilly, J. McFarland, and S. Paltsev, 2006, "Technology and Technical Change in the MIT EPPA Model," *Energy Economics*, 28(5-6), p. 610-631.

Becker, C. and S. Paltsev, 2004, "Economic Consequences of Demographic Change in the Former USSR: Social Transfers in the Kyrgyz Republic," *World Development*, 32(11), p. 1849-1870.

Paltsev S., 2001, "The Kyoto Protocol: Regional and Sectoral Contributions to the Carbon Leakage," *Energy Journal*, 22(4), p. 53-79.

Becker, C. and S. Paltsev, 2001, "Macro-Experimental Economics in the Kyrgyz Republic: Social Security Sustainability and Pension Reform," *Comparative Economic Studies*, 43(3), p. 1-34.

Apanasovich, V. and S. Paltsev, 1995, "Distortion of photon correlation function in detection systems with paralyzable dead time effects," *Journal of the Optical Society of America B*, 12(9), p. 1550-1554.

Apanasovich, V., I. Gulakov, A. Zenevich, Ye. Novikov, and S. Paltsev, 1994, "The analyzer of temporal and correlation characteristics of random flows of signals," *Pribory i Tekhnika Eksperimenta*, 37(2), p. 201-202 (in Russian, the journal is published in English as "*Instruments and Experimental Techniques*").

Apanasovich, V. and S. Paltsev, 1994, "Modeling and comparative analysis of correlators of random flows of signals," *Electronnoe Modelirovanie*, 16(1), p. 84-87 (in Russian, the journal is published in English as "Engineering Simulation").

II. Book Chapters:

Bosetti, V., S. Paltsev, J. Reilly, and C. Carraro, 2012, "Emissions Pricing to Stabilize Global Climate," in *Fiscal Policy to Mitigate Climate Change: A Guide for Policymakers*, R. de Mooij, I. Parry, and M. Keen (eds.), International Monetary Fund, p. 49-67.

Rausch, S., G. Metcalf, J. Reilly, and S. Paltsev, 2011, "Distributional Impacts of a U.S. Greenhouse Policy: A General Equilibrium Analysis of Carbon Pricing," in *U.S. Energy Tax Policy*, G. Metcalf (ed.), Cambridge University Press, p. 52-107.

Gavard, C., N. Winchester, and S. Paltsev, 2011, "Accord sectorial entre un marche carbone americain et le secteur electrique chinois," (Sectoral agreement between the U.S. carbon market and Chinese electricity sector) in *Economie du climate: Pistes pour l'apres Kyoto* (Climate Economics: Ideas for after-Kyoto), O. Godard and J.-P. Ponssard (eds.), Editions de l'Ecole Polytechnique, p. 263-280 (in French).

Jacoby, H., M. Babiker, S. Paltsev, and J. Reilly, 2009, "Sharing the Burden of GHG Reductions," in *Post-Kyoto International Climate Policy*, J. Aldy and R. Stavins (eds.), Cambridge University Press, p. 753-785.

Paltsev, S. and J. Reilly, 2009, "Energy Scenarios for East Asia: 2005-2025," in *From Growth to Convergence: Asia's Next Two Decades*, F. Zhai (ed.), Palgrave Macmillan, p. 211-239.

Paltsev, S., J. Reilly, and A. Gurgel, 2009, "Greenhouse Gas Markets, Carbon Dioxide Credits, and Biofuels," in *The Biofuels Market: Current Situation and Alternative Scenarios*, S. Zarrilli (ed.), United Nations: Geneva and New York, p. 15-27.

Paltsev, S., J. Reilly, and A. Gurgel, 2009, "Commercial Viability of Second Generation Biofuel Technology," in *The Biofuels Market: Current Situation and Alternative Scenarios*, S. Zarrilli (ed.), United Nations: Geneva and New York, p. 29-50.

Reilly, J. and S. Paltsev, 2009, "Biomass Energy and Competition for Land," in *Economic Analysis of Land Use in Global Climate Change Policy*, T. Hertel, S. Rose, R. Tol (eds.), Routledge, p. 184-207.

Paltsev, S., J. Reilly, H. Jacoby, and K-H. Tay, 2007, "How (and Why) Do Climate Policy Costs Differ Among Countries?" in *Human-Induced Climate Change: An Interdisciplinary Assessment*, M. Schlesinger et al (eds.), Cambridge University Press, p. 282-293.

Reilly J. and S. Paltsev, 2006, "European Greenhouse Gas Emissions Trading: A System in Transition," in *Economic Modeling of Climate Change and Energy Policies*, M. De Miguel, X. Labandeira, B. Manzano (eds.), Edward Elgar Publishing, p. 45-64.

Yang, T., J. Reilly, and S. Paltsev, 2005, "Air Pollution Health Effects: Toward an Integrated Assessment," in *The Coupling of Climate and Economic Dynamics*, A.Haurie and L.Viguier (eds.), Springer, p. 267-294.

Paltsev, S., H. Jacoby, J. Reilly, L. Viguier, and M. Babiker, 2005, "Modeling the Transport Sector: The Role of Existing Fuel Taxes in Climate Policy", in *Energy and Environment*, [25th Anniversary volume of the Group for Research in Decision Analysis (GERAD), Volume 3], R. Loulou, J.-P. Waaub, G. Zaccour (eds.), Springer, p. 211-238.

III. MIT Joint Program Reports and Other Publications:

Paltsev, S., S. Dutkiewicz, V. Ekstrom, C. Forest, A. Gurgel, J. Huang, V. Karplus, E. Monier, J. Reilly, J. Scott, A. Slinn, T. Smith-Grieco, and A. Sokolov, 2012, "Energy and Climate Outlook 2012," MIT Joint Program on the Science and Policy of Global Change, 2012, Special Report, Cambridge, MA. (available at: http://globalchange.mit.edu/research/publications/other/special/2012Outlook)

Paltsev S., 2012, "Implications of Alternative Mitigation Policies on World Prices for Fossil Fuels and Agricultural Products," United Nations University, World Institute for Development Economic Research, Working Paper 2012/65, Helsinki, Finland.

(available at: http://www.iadb.org/intal/intalcdi/PE/2012/11236.pdf)

O'Sullivan, F. and S. Paltsev, 2012, "Shale Gas Production: Potential versus Actual GHG Emissions," MIT Joint Program on the Science and Policy of Global Change, Report 234, Cambridge, MA. (available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt234.pdf)

Nam, K.-M., C. Waugh, S. Paltsev, J. Reilly, V. Karplus, 20120, "Climate Co-benefits of Tighter SO2 and NOx Regulations in China," MIT Joint Program on the Science and Policy of Global Change, Report 233, Cambridge, MA.

(available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt233.pdf)

Kishimoto, P., S. Paltsev, V. Karplus, 2012, "The Future Energy and GHG Emissions Impact of Alternative Personal Transportation Pathways in China," MIT Joint Program on the Science and Policy of Global Change, Report 231, Cambridge, MA.

(available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt231.pdf)

Karplus, V., and S. Paltsev, 2012, "The Economic, Energy, and GHG Emissions Impacts of Proposed 2017–2025 Vehicle Fuel Economy Standards in the United States," MIT Joint Program on the Science and Policy of Global Change, Report 226, Cambridge, MA.

(available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt226.pdf)

Reilly, J., S. Paltsev, K. Strzepek, N. Selin, Y. Cai, K.-M. Nam, E. Monier, S. Dutkiewicz, J. Scott, M. Webster and A. Sokolov, 2012, "Valuing Climate Impacts in Integrated Assessment Models: The MIT IGSM," MIT Joint Program on the Science and Policy of Global Change, Report 219, Cambridge, MA. (available at: http://globalchange.mit.edu/files/document/MITJPSPGC Rpt219.pdf)

- Karplus, V., S. Paltsev, M. Babiker and J. Reilly, 2012, "Combining a New Vehicle Fuel Economy Standard with a Cap-and-Trade Policy: Energy and Economic Impact in the United States," MIT Joint Program on the Science and Policy of Global Change, Report 217, Cambridge, MA (available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt217.pdf)
- Karplus, V., S. Paltsev, M. Babiker, J. Heywood and J. Reilly, 2012, "Applying Engineering and Fleet Detail to Represent Passenger Vehicle Transport in a Computable General Equilibrium Model," MIT Joint Program on the Science and Policy of Global Change, Report 216, Cambridge, MA. (available at: http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt216.pdf)
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Asian Modeling Exercise - The Role of Asia in Mitigating Climate Change (March 2011; Xi'an, China). Presentation: "The Role of China in Mitigating Climate Change".

SAE 2011 Government/Industry Meeting (January 2011; Washington, DC, USA). Presentation: "Should an Economy-Wide Carbon Policy be Combined with a Vehicle Fuel Economy Standard? Implications for Vehicles, Fuels, the Economy, and Environment".

MIT Center for Energy and Environmental Policy Research (CEEPR) Workshop (December 2010; Cambridge, MA, USA). Presentation: "Natural Gas Markets".

XXI MIT Global Change Forum: Confronting Domestic and Global Climate Strategies (October 2010; Brussels, Belgium). Program Sponsors Meeting Presentation: "Natural Gas Study and Implications for Climate Policy".

3rd International Conference Energetika XXI: Economy, Policy, Ecology (October 2010, Gazprom and St. Petersburg State University of Economics and Finance; St. Petersburg, Russia). Presentation: "Russia's Natural Gas Exports with and without Climate Change Policy".

Systematic Analysis of Climate Resilient Development (October 2010, World Institute for Development Economics Research of the United Nations University (UNU-WIDER) and International Food Policy Research Institute (IFPRI); Washington, DC, USA). Presentation: "Global Modeling and World Prices".

MIT-IEEJ Energy and Global Change Workshop: Looking to the Future (September 2010, Institute of Energy Economics of Japan, Keidanren Kaikan; Tokyo, Japan). Presentations: "Asian Energy Supply and Demand Forecasts" and "Coal Sector with and without Carbon Capture".

Asian Modeling Forum (September 2010, Korea Environment Institute; Seoul, South Korea). Presentation: "Baseline Projections: Results from the EPPA Model".

International Conference on Economic Modeling (July 2010, Istanbul Bilgi University, Central Bank of the Republic of Turkey, The World Bank; Istanbul, Turkey). Presentation: "Russia's Natural Gas Export Potential up to 2050".

GTAP Conference on Global Economic Analysis (June 2010, UN Economic and Social Commission for Asia and the Pacific and Asian Development Bank; Penang, Malaysia). Presentation: "The Role of Natural Gas under Carbon Constraints".

Asian Modeling Forum (March 2010, Tsinghua University; Beijing, China). Presentation: "Growth and Emissions: Results from the EPPA Model".

Climate Change Policy: U.S. and Post-Copenhagen (January 2010, Bank of America Merrill Lynch; London, United Kingdom). Presentation: "Cap-and-Trade Systems and Renewable Energy".

BP-MIT Conversion Research Program (January 2010, BP; Sunbury, United Kingdom). Technical Review Meeting.

Seminar at the International Graduate School of Business and Management of Technology of Belarusian State University (November 2009, Belarusian State University; Minsk, Belarus). Presentation: "Economic Modeling of Energy and Environment".

GTAP Conference on Global Economic Analysis: Trade Integration and Sustainable Development - Looking for an Inclusive World (June 2009, Economic Commission for Latin America and the Caribbean; Santiago, Chile). Presentation: "Russia and the World Energy Markets: Long-Term Scenarios".

E.On Executive Program: Leading Innovation and Growth (October 2008, E.On Academy and MIT Sloan Executive Education; Dedham, MA, USA). Presentation: "Russian Perspective: Recent Developments and Long-Term Projections of Energy Markets".

Energy Modeling Forum Transition Policy Group (September 2008, Stanford University and International Institute for Applied Systems Analysis (IIASA); Laxenburg, Austria), Presentation: "U.S. Transition Scenarios: EPPA Results".

GTAP Conference on Global Economic Analysis: The Future of Global Economy (June 2008, Government Institute for Economic Research (VATT) and United Nations University - WIDER; Helsinki, Finland), Presentation: "Incorporating Household Transportation Sector into a General Economic Equilibrium Model: Implications for Climate Policy".

Jeddah Environmental Forum (April 2008, Jeddah Chamber of Commerce and Industry; Jeddah, Saudi Arabia), Presentation: "Energy Supply, Energy Demand, and Challenges of Climate Change".

India and China's Role in International Trade and Finance and Global Economic Governance (December 2007, Indian Council for Research on International Economic Relations, Konrad-Adenauer-Stiftung, and International Monetary Fund; Delhi, India), Presentation: "China and India in Energy Markets and Its Implications for Global Greenhouse Gas Emissions".

Potential Climate Impacts (November 2007, Shell International B.V; The Hague, The Netherlands), Presentation: "Economic and Climate Studies Using the MIT Integrated Global System Model".

Energy and Environmental Modeling (September 2007, Ecomod, Academy of the National Economy under the Government of Russian Federation, and Institute for the Economy in Transition; Moscow, Russia), Presentation: "Long-Term Energy Scenarios for Asia".

Climate Policy Network Meeting (March 2007, Zentrum fur Europaische Wirtschaftsforschung (ZEW); Mannheim, Germany), Presentation: "Cost of Climate Stabilization in Computable General Equilibrium Models (based on the U.S. Climate Change Science Program Synthesis and Assessment Product 2.1.a)".

Macroeconomic Models of Uzbekistan (September 2006, United Nations Development Programme, Tashkent, Uzbekistan). Presentation: "Aggregated Version of CGE Model for Uzbekistan: Taxation and International Trade" (with M. Light).

GTAP Conference on Global Economic Analysis: Multilateralism, Bilateralism, and Development (June 2006, United Nations Economic Commission for Africa; Addis Ababa, Ethiopia). Presentation: "Incorporating Climate Change Feedbacks into a General Economic Equilibrium Model".

XXIV MIT Global Change Forum (January 2006, Coral Gables, Florida, USA). Presentation: "Ongoing Stabilization Scenario Exercises: New Scenarios for the U.S. Climate Change Science Program".

Climate Policy Network Meeting (September 2005, Chia Laguna, Sardinia, Italy). Presentation: "Incorporating Climate Change Feedbacks into the EPPA model".

European Geosciences Union General Assembly (April 2005, Vienna, Austria). Presentation: "Uncertainty in Emissions Projections in the MIT Integrated Global System Model".

Conference of the International Society for Environmental Epidemiology: Addressing Urban Environmental Problems (August 2004, New York University, New York, USA), Presentation: "Air Pollution Health Effects: Toward an Integrated Assessment".

International Conference on Policy Modeling (July 2004, Universite Paris I - Pantheon Sorbonne; Paris, France). Presentation: "Air Pollution Health Effects: Toward an Integrated Assessment".

GTAP Conference on Global Economic Analysis: Trade, Poverty, and the Environment (June 2004, The World Bank; Washington DC, USA). Presentation: "Disaggregating Household Transport in the MIT-EPPA Model".

Purchasing-Power-Parity vs Market-Exchange-Rate Workshop (February 2004, Stanford University, Australian Greenhouse Gas Office, and U.S. Environmental Protection Agency; Palo Alto, USA), Participant.

The Economic Consequences of Alternative Pension Policies (February 1999, Asian Development Bank, International Management and Communication Corporation, Social Fund of Kyrgyz Republic; Bishkek, Kyrgyzstan). Presentation: "Structure and uses of PROST".

Economic Transformation in Russia: Views of a New Generation (May 1997, International Research and Exchanges Board (IREX), New Economic School, United States Information Agency; Moscow, Russia). Participant.

Business Training for Multinational Corporations (January-February 1997, ACTR/ACCELS, U.S.-Russia Business Forum, United States Information Agency; St. Petersburg, Russia). Participant.

Higher Education: State and Perspectives (December 1995, The Ministry of Education and Science of the Republic of Belarus and The Republican Institute of Higher School and Humanities; Minsk, Belarus). Presentation: "Project of the Masters Program in Economics and Management of Technology".

Central Asia's Economies in Transition (July 1995, The Economics Institute, The United States Agency for International Development and Academy for Educational Development; Boulder, USA). Symposium Director.

Contemporary Russia: Myth and Reality (April 1995, The University of Colorado at Denver and The National Endowment for the Humanities; Denver, USA). Presentation: "Pace of the Economic Reform in Belarus".

The Transition to a Market Economy in the Central Asian Republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (December 1994, The Economics Institute; Boulder, USA). Chairman of the Session.