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### **Education**

University of Colorado, Boulder, Economics, Ph.D., 2009  
University of Colorado, Boulder, Economics, M.S., 2005  
National Central University, Taiwan, Industrial Economics, M.B.A., 2000  
National Central University, Taiwan, Mechanical Engineering, B.E.; and Economics, B.B.A., 1998

### **Appointments**

4/12-present Research Scientist, Center for Sustainability Science and Strategy (formerly known as the Joint Program on the Science and Policy of Global Change), MIT  
1/11-1/12 Consultant, Development Research Group, The World Bank  
5/09-12/10 Postdoctoral Researcher, Joint Program on the Science and Policy of Global Change, MIT

### **Journal Publications**

- Jebeli, H., Y.-H. H. Chen, C. Johnston, S. Paltsev and M.-C. Tremblay (2025). “Impacts of border carbon adjustments on the Canadian economy.” *Energy Economics*, 141, p.108089. <https://doi.org/10.1016/j.eneco.2024.108089>
- Chiquier, S., A. Gurgel, J. Morris, H. Chen, and S. Paltsev (2024). “Integrated Assessment of Carbon Dioxide Removal Portfolios: Land, Energy, and Economic Trade-Offs for Climate Policy.” *Environmental Research Letters*. Forthcoming.
- Morris, J., Y.-H. H. Chen, A. Gurgel, J. Reilly and A. Sokolov (2023): Net Zero Emissions of Greenhouse Gases by 2050: Achievable and at What Cost?. *Climate Change Economics*, 14(4). <https://doi.org/10.1142/S201000782340002X>
- Desport, L., A. Gurgel, J. Morris, H. Herzog, H. Chen, S. Selosse, and S. Paltsev (2023). “Deploying direct air capture at scale: how close to reality?” *Energy Economics*, 129, 107244 (doi: 10.1016/j.eneco.2023.107244).
- Chen, Y.-H. Henry, S. Paltsev, A. Gurgel, J. Reilly and J. Morris (2022). “A multisectoral dynamic model for energy, economic and climate scenario analysis.” *Low Carbon Economy*, 13(2) (doi: 10.4236/lce.2022.132005)
- Atkinson, W., S.D. Eastham, Y.-H.H. Chen, J. Morris, S. Paltsev, C.A. Schlosser and N.E. Selin (2022). A Tool for Air Pollution Scenarios (TAPS v1.0) to enable global, long-term, and flexible study of climate and air quality policies. *Geoscientific Model Development*, 15, 7767–7789 (doi: 10.5194/gmd-15-7767-2022)
- Chen, Y.-H. Henry, E. Landry, and J. Reilly (2022). “An economy-wide framework for assessing the stranded assets of the energy production sector under climate policies.” *Climate Change Economics*, 29 p.
- Paltsev, S., A. Gurgel, J. Morris, H. Chen, S. Dey and S. Marwah (2022). “Economic analysis of the hard-to-abate sectors in India.” *Energy Economics*, 112, 106149.
- Chen, Y.-H. H., J.M. Reilly and S. Paltsev (2021). “The role of shale gas in shaping the U.S. long-run CO2 emissions.” *Energy & Environment*, 32(4), 737-755.

- Hong, W.-H., H.-C. Chai, Y.-H.H. Chen, J. M. Reilly and S. Paltsev (2021). “Will using newer input-output data for general equilibrium modeling provide a better estimate for the CO2 mitigation cost?” *Economic Systems Research*, 33(2), 157-170.
- Reilly, J., Y.-H. H. Chen, and H. Jacoby (2021). “The COVID-19 effect on the Paris agreement.” *Humanities and Social Sciences Communications* 8.
- Paltsev, S, A. Ghandi, J. Morris and Y.-H. H. Chen (2021). “Global Electrification of light-duty vehicles: Impacts of economics and climate policy.” *Economics of Energy & Environmental Policy*, 11(1).
- Makarov, I., H. Chen and S. Paltsev (2020). “Impacts of climate change policies worldwide on the Russian economy.” *Climate Policy*, 20(10), 1242-1256.
- Chai, H.-C., W.-H. Hong, J. Reilly, S. Paltsev, and Y.-H. H. Chen, 2019: Will Greenhouse Gases Mitigation Policies Abroad affect the Domestic Economy? The Case of Taiwan. *Climate Change Economics*, forthcoming.
- Morris, J., J. Farrell, H. Kheshgi, H. Thomann, Y.-H. H. Chen, S. Paltsev and H. Herzog, 2019: Representing the Costs of Low-Carbon Power Generation in Multi-region Multi-sector Energy-Economic Models. *International Journal of Greenhouse Gas Control*, 87, 170-187.
- Morris, J.F., J.M. Reilly and Y-H.H. Chen, 2019: Advanced Technologies in Energy-Economy Models for Climate Change Assessment. *Energy Economics*, 80: 476-490.
- Makarov I. A., Chen H., Paltsev S, 2018: Implications of the Paris Climate Agreement for the Russian economy. *Economic issues*, 4: 76-94 (in Russian).
- Monier, E., S. Paltsev, A. Sokolov, Y.-H.H. Chen, X. Gao, Q. Ejaz, E. Couzo, C. Schlosser, S. Dutkiewicz, C. Fant, J. Scott, D. Kicklighter, J. Morris, H. Jacoby, R. Prinn and M. Haigh, 2018: Toward a consistent modeling framework to assess multi-sectoral climate impacts. *Nature Communications*, 9, 660 (doi:10.1038/s41467-018-02984-9).
- Jacoby, H.D., Y.-H. H. Chen, B.P. Flannery, 2017: Informing transparency in the Paris Agreement: the role of economic models. *Climate Policy*, 17(7): 873–890 (Derived from JP Report No. 308)
- Chen, Y.-H. H. Henry, 2017: The Calibration and Performance of a Non-homothetic CDE Demand System for CGE Models. *Journal of Global Economic Analysis*, 2(1): 166-214. (Derived from JP Report No. 307)
- Ramberg, D.J., Y.-H. H. Chen, S. Paltsev and J.E. Parsons, 2017: The economic viability of Gas-to-Liquids technology and the crude oil-natural gas price relationship. *Energy Economics*, 63(2017): 13-21
- Paltsev, S., Y.-H. H. Chen, V. Karplus, P. Kishimoto, J. Reilly, A. Loeschel, K. von Graevenitz and S. Koesler, 2016: Reducing CO2 from cars in the European Union, *Transportation*, (doi:10.1007/s11116-016-9741-3)
- Chen, Y.-H. H., S. Paltsev, J.M. Reilly, J.F. Morris and M.H. Babiker, 2016: Long-term economic modeling for climate change assessment, *Economic Modelling*, 52(Part B): 867–883.
- Paltsev, S., V. Karplus, Y.-H. H. Chen, I. Karkatsouli, J.M. Reilly, and H.D. Jacoby, 2015: Regulatory control of vehicle and power plant emissions: how effective and at what cost? *Climate Policy* 15(4): 148–457.
- Chen, Y.-H. H., 2013: Non-nuclear, Low-carbon, or Both? The Case of Taiwan. *Energy Economics*, 39: 53-65.
- Knopf, B., Y.-H. H. Chen, E. De Cian, H. Förster, A. Kanudia, I. Karkatsouli, I. Keppo, T. Koljonen, K. Schumacher, and D. P. van Vuuren, 2013: Beyond 2020 - Strategies and costs for transforming the European energy system, *Climate Change Economics*, 4(1): 38 p.

- Chen, Y.-H. H., G. Timilsina, and F. Landis, 2013: Economic implications of reducing carbon emissions from energy use and industrial processes in Brazil, *Journal of Environmental Management*, 130: 436–446.
- Chan, G., J. Reilly, S. Paltsev, and Y.-H. H. Chen, 2012: The Canadian Oil Sands Industry Under Carbon Constraints. *Energy Policy*, 50: 540-550.
- Chen, Y.-H. H., J. Reilly, and S. Paltsev: The Prospects for Coal-To-Liquid Conversion: A General Equilibrium Analysis. *Energy Policy*, 39(9): 4713-4725.
- Chen, Y.-H. H., 2011: Are Multinationals Exporting Jobs? The Case of Taiwan. *Asian-Pacific Economic Literature*, 25(2): 89-102.
- Chen, Y.-H. H., 2011: Trade, Industrial Structure, and Brand. *Industrial and Corporate Change*, 20(1): 133-174.

### **Other Publications and Working Papers in the past two years**

- Chen, Y.-H. H., 2026: “Comparing general equilibrium modeling in Julia and GAMS: An example using CSAVE.” Working paper. MIT Center for Sustainability Science and Strategy. <https://chenyhmitedu.github.io/>
- Chen, Y.-H. H. and S. Paltsev, 2025: “Country-Specific Framework for Environmental Policy Analysis (CSAVE): Assessing International Financing for Climate Change Adaptation in Bangladesh.” Working paper. MIT Center for Sustainability Science and Strategy.
- Guedal, T. L., V. Poudroux, Y.-H. H. Chen, F. Lepetit, H.-N. Nguyen, and S. Paltsev, 2025: “Towards Climate-Related Financial Stress-Testing and Scenario Valuation.” Working paper. MIT Center for Sustainability Science and Strategy.
- Maxime, L., T. Calamai, L. Colin, T. L. Guedal, S. Luda, Y.-H. H. Chen, and S. Paltsev., 2025: “AI Growth Integration in Transition and Economic Scenarios.” Working paper. MIT Center for Sustainability Science and Strategy.
- Chen, Y.-H. H., 2025: “Comparing general equilibrium modeling in Julia and GAMS: An example using CSAVE.” Working paper. MIT Center for Sustainability Science and Strategy.
- Guedal, T. L., V. Poudroux, H. Chen, S. Paltsev, F. Lepetit, and H.-N. Nguyen (2024). “Climate-Related Stress-Testing and Net-Zero Valuation: Generalization on Investment Universe.” Working paper. MIT Center for Sustainability Science and Strategy.
- Paltsev, S. and Y.-H. H. Chen (2024). “Carbon Emission Mitigation and Trade Impacts for Taiwan.” Working paper. MIT Center for Sustainability Science and Strategy.
- Chen, Y.-H. H. and S. Paltsev (2024). “Country-specific Framework for Environmental Policy Analysis.” Working paper. MIT Center for Sustainability Science and Strategy.
- Chen, Y.-H.H (2024): An Analysis of Carbon Constraint Modeling. Presented for 27th Annual Conference on Global Economic Analysis. Fort Collins, Colorado ([https://www.gtap.agecon.purdue.edu/resources/res\\_display.asp?RecordID=7185](https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=7185)).
- Chen, Y.-H.H and J. Siegle (2024): Representation of fuel usage in general equilibrium modeling. Presented for 27th Annual Conference on Global Economic Analysis. Fort Collins, Colorado ([https://www.gtap.agecon.purdue.edu/resources/res\\_display.asp?RecordID=7196](https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=7196)).

### **Ph.D. Advisor**

James R. Markusen, University of Colorado at Boulder.