JAMES J. CORBETT, JR.

College of Earth, Ocean, and Environment, University of Delaware, 305 Robinson Hall, Newark, DE 19716-3501 (302) 831-0768, (302) 831-6838 fax, <a href="mailto:icongreyed-leducollege-ledu

EDUCATION

Ph.D., Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, April 1999.

M.S. Mechanical Engineering, Carnegie Mellon University, Pittsburgh, PA, May 1998.

M.S. Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, May 1997.

B.S., Marine Engineering Technology, California Maritime Academy, Vallejo, CA, May 1985.

Professional Engineer, Mechanical, State of California (License No. M28238), 1993.

PROFESSIONAL EMPLOYMENT

Professor, School of Marine Science and Policy, College of Earth, Ocean, and Environment, University of Delaware, September 2009 – present.

Professor, School of Public Policy and Administration, College of Arts and Sciences, UofD, 2014 –2017/2018-2021.

 $Professor, Civil \ and \ Environmental \ Engineering, \ College \ of \ Engineering, \ Uof D, \ Jan \ 2007-Dec \ 2009/2018-2021.$

Associate Director for Marine Policy Program, School of Marine Science and Policy, 2013-2018.

Interim Director, Marine Policy Program, College of Marine and Earth Studies, UofD, Sep 2007 – Aug 2008.

Associate Professor, College of Marine and Earth Studies, University of Delaware, Sep 2006 – Sep 2009.

Associate Professor, Civil and Environmental Engineering, University of Delaware, Sep 2006 – Sep 2009.

Principal, Energy and Environmental Research Associates, 2006- present.

Assistant Professor, Graduate College of Marine Studies, University of Delaware, August 2000 – September 2006.

Commissioned Officer, U.S. Naval Reserve, May 1985 – September 2001.

Post-Doctoral Research Engineer, Carnegie Mellon University, June 1999 – August 2000.

Graduate Researcher and Ph.D. Candidate, Carnegie Mellon University, August 1995 - June 1999.

Instructor, Undergraduate Research Ethics Seminars, Carnegie Mellon University, Fall 1997, Spring 1998.

Engineering Instructor, Carnegie Mellon Action Program (CMAP), Pittsburgh, PA, July - August 1996 and 1997.

Teaching Assistant, Introduction to EPP (19-101), Prof. Ed Rubin, Dept of EPP, Fall 1996.

Staff Engineer, Radian International LLC, Walnut Creek, CA, December 1990 – July 1995.

Stationary Engineer, Crystal Cream and Butter Company, June 1990 - December 1990.

Stationary Engineer, Department of Public Works, City of San Francisco, CA, June 1989 - June 1990.

Assistant Teacher of Physics (part time), Lick Wilmerding High School, June 1989 - June 1990.

Teacher, Math and Physics, St. Mary's College High School, Berkeley, CA, September 1987 - June 1989.

Oceangoing Third Assistant Engineer, Exxon Shipping Company, Houston, TX, January 1986 - August 1987.

Field Service Engineer, Westinghouse Corporation, Phoenix, AZ, June 1985 - January 1986.

PUBLICATIONS *Summary*: 68 Peer-reviewed journal articles; 12 Book chapters or sections; 54 Conference papers; 94 Reports; 15 Other (Opinion/Media/ Dictionary/Editorial pieces). ResearcherID.com lists 74 of 310 cited articles *h-index*=31, ~4276 total academic citations as of 8 May 2020; Scopus.com lists 70 cited articles *h-index*=29, 4003 total academic citations as of 8 May 2020; Google Scholar lists 170 documents *h-index*=42 (*i-10 index*=81), ~8947 citations as of 8 May 2020. Publons lists 210 publications, *h-index*=29, 3904 citations, 80 verified reviews, as of 25 July 2020.

INVITED TALKS, WORKSHOPS AND CONFERENCE PRESENTATIONS More than 227, including more than 60 international venues; testified before United States Senate, Committee on Environment and Public Works

RESEARCH CONTRACTS Principal investigator or co-PI for awards totaling ~\$5.49M (~\$1M since 2013).

ACADEMIC AND COMMUNITY SERVICE (selected examples) *College and University:* SMSP Director's Council, 2014-present; Executive Council of Delaware Environmental Institute, 2015-2017; SMSP P&T Committee, 2009-2011, Chair 2010-2011; *Professional Practice:* Expert Steering Committee for IMO Fuel Oil Availability Review, 2015-16; TRB Committee on Reinvesting in Inland Waterways, 2013-2015; TRB Committee on Marine Environment, AW030, 2006-2013/2016-2019; TRB Committee on Transportation Energy, ADC70, 2008-2013; *Community:* Port of Wilmington Maritime Society Board 2010-2015; US Senate Testimony, Committee on Env. and Public Works, 2005.

COURSES TAUGHT AT UNIVERSITY OF DELAWARE MAST663 Decision Tools for Policy Analysis; MAST802 Case Study in Environmental Decision Making; MAST 865 Analytical Paper; MAST 200 Oceans; CIEG467 Industrial Ecology; MAST662 Applied Policy Analysis; MAST873 Marine Policy Seminar; MAST817 Research Design and Methods; MAST664 Marine Transportation Policy; MAST679 Shipping and Port Management.

AFFILIATIONS California State University Maritime 2017 Distinguished Alum, National Society of Professional Engineers, American Geophysical Union, Transportation Research Board, World Tang Soo Do Association (Sam Dan)

JOURNAL PUBLICATIONS

- 1. Zhaojun Wang, Duy Nong, Amanda Countryman, Travis Warziniack, **James J. Corbett**. *Potential Impact of Environmental Regulations on Trade and Transportation: An Integrated CGE and Shipping Cost Modeling Approach*. Journal of Environmental Management, accepted 2020.
- 2. S.D. Rathod, D.S. Hamilton, N.M. Mahowald, Z. Klimont, **J.J. Corbett**, and T.C. Bond, A mineralogy-based anthropogenic combustion-iron emission inventory, Journal of Geophysical Research, https://doi.org/10.1029/2019JD032114, August 2020.
- 3. Mandana Saebi; Jian Xu, Erin K. Grey, David M. Lodge, **James J. Corbett**, Nitesh Chawla, Higher-order patterns of aquatic species spread through the global shipping network, PLOS ONE, 15(7): e0220353, https://doi.org/10.1371/journal.pone.0220353, 31 July 2020.
- 4. Zhaojun Wang, Jordan Silberman, **James J. Corbett**. *Container Vessels Diversion Pattern to trans-Arctic Shipping Routes and Environmental Impacts*. Maritime Policy and Management, http://dx.doi.org/10.1080/03088839.2020.1795288, July 2020.
- Mokashi, A., Becker, A., Corbett, J.J., America's Marine Highway Stakeholders: A System Scale Analysis of Influence In Decision Making, WMU Journal of Maritime Affairs, https://doi.org/10.1007/s13437-020-00212-0, 24 July 2020.
- Zhaojun Wang, James J. Corbett. Scenario-based cost-effectiveness analysis of ballast water treatment strategies. Special Issue: Proceedings of the 21st International Conference on Aquatic Invasive Species; Guest editors: Sarah Bailey, Mattias Johansson, Brenda Koenig and Linda Shaw, Management of Biological Invasions 11 (in press), Received: 13 September 2019 Accepted: 30 March 2020 Published: 10 May 2020; https://www.reabic.net/journals/mbi/2020/ICAIS.aspx.
- 7. Viana, M., Rizza, V., Tobías, A., Carr, E., Corbett, J., Sofiev, M., ... Fann, N. (2020). Estimated health impacts from maritime transport in the Mediterranean region and benefits from the use of cleaner fuels. *Environment International*, *138*, 105670. https://doi.org/10.1016/J.ENVINT.2020.105670.
- 8. Winebrake, J. J., **Corbett, J.J.**, Umar, F., Yuska, D. Pollution Tradeoffs for Conventional and Natural Gas-Based Marine Fuels. *Sustainability* **11**, 2235 (2019).
- Sofiev, M., J.J. Winebrake, L. Johansson, E.W. Carr, M. Prank, J. Soares, J. Vira, R. Kouznetsov, J.-P. Jalkanen and J.J. Corbett (2018). "Cleaner fuels for ships provide public health benefits with climate tradeoffs." Nature Communications 9(1): 406.
- 10. Corbett, J.J., Transport: Shipping emissions in East Asia. Nature Climate Change 2016, 6, (11), 983-984.
- 11. Vaishnav, P.; Fischbeck, P. S.; Morgan, M. G.; **Corbett, J.J.**, Shore Power for Vessels Calling at US Ports: Benefits and Costs. Environmental science & technology 2016, 50, (3), 1102-1110.
- 12. Thomson, H.; Corbett, J.J.; Winebrake, J.J., Natural gas as a marine fuel. Energy Policy 2015, 87, 153-167.
- 13. Carr, E. W.; **Corbett, J.J.**, Ship Compliance in Emission Control Areas: Technology Costs and Policy Instruments. Environmental Science & Technology 2015, 49, (16), 9584-9591.
- 14. Huang, W., **J.J. Corbett**, and D. Jin, Regional economic and environmental analysis as a decision support for marine spatial planning in Xiamen. Marine Policy, 2015. 51(0): p. 555-562.
- 15. Samoteskul, K.; Firestone, J.; Corbett, J.J., Callahan, J., Changing vessel routes could significantly reduce the cost of future offshore wind projects. Journal of Environmental Management, 2014. 141(0): p. 146-154.
- 16. Browse, J.; Carslaw, K. S.; Schmidt, A.; **Corbett, J.J.**, Impact of future Arctic shipping on high-latitude black carbon deposition. Geophysical Research Letters 2013, 40, (16), 4459-4463.
- 17. Hassellöv, I.-M.; Turner, D. R.; Lauer, A.; **Corbett, J.J.**, Shipping contributes to ocean acidification. Geophysical Research Letters 2013, 40, (11), 2731-2736.
- 18. Dalsøren, S. B., Samset, B. H., Myhre, G., **Corbett, J.J.**, Minjares, R., Lack, D., and Fuglestvedt, J. S.: Environmental impacts of shipping in 2030 with a particular focus on the Arctic region, Atmos. Chem. Phys., 13, 1941-1955, doi:10.5194/acp-13-1941-2013, 2013.
- 19. **Corbett, J.J.**; Deans, E.; Silberman, J.; Morehouse, E.; Craft, E.; Norsworthy, M., Panama Canal expansion: emission changes from possible US west coast modal shift. Carbon Management 2012, 3, (6), 569-588.
- 20. Yau, P. S.; Lee, S. C.; Corbett, J.J.; Wang, C.; Cheng, Y.; Ho, K. F., Estimation of exhaust emission from ocean-going vessels in Hong Kong. *Science of The Total Environment* 2012, 431, (0), 299-306.
- 21. Winebrake, J.J.; Green, E. H.; Comer, B.; Corbett, J.J.; Froman, S., Estimating the direct rebound effect for on-road freight transportation. *Energy Policy* 2012, 48, (0), 252-259.
- 22. Lack, D. A.; **Corbett, J.J.**, Black carbon from ships: a review of the effects of ship speed, fuel quality and exhaust gas scrubbing. *Atmos. Chem. Phys.* 2012, 12, (9), 3985-4000.
- 23. Meyer, P. E.; Green, E. H.; Corbett, J.J.; Mas, C.; Winebrake, J.J., Total Fuel-Cycle Analysis of Heavy-Duty Vehicles Using Biofuels and Natural Gas-Based Alternative Fuels. Journal of the Air and Waste Management Association, 61, (3), 285-294 2011.

- 24. **Corbett, J.J.**; Winebrake, J.; Green, E., An assessment of technologies for reducing regional short-lived climate forcers emitted by ships with implications for Arctic shipping. *Carbon Management*, 1, (2), 207-225, 2010.
- 25. Comer, B.; Corbett, J.J.; Hawker, J. S.; Korfmacher, K.; Lee, E. E.; Prokop, C.; Winebrake, J.J., Marine Vessels as Substitutes for Heavy-1 Duty Trucks in Great Lakes Freight Transportation. *Journal of Air and Waste Management*, 2010.
- 26. Corbett, J.J.; Lack, D. A.; Winebrake, J.J.; Harder, S.; Silberman, J. A.; Gold, M., Arctic shipping emissions inventories and future scenarios. *Atmos. Chem. Phys.*, 10, (19), 9689-9704, 2010.
- 27. Corbett, J.J.; Lack, D. A.; Winebrake, J.J.; Harder, S.; Silberman, J. A.; Gold, M., Arctic shipping emissions inventories and future scenarios. *Atmos. Chem. Phys. Discuss.*, 10, (4), 10271-10311, 2010.
- 28. **Corbett, J.J.**; Winebrake, J.J., The Role of International Policy in Mitigating Global Shipping Emissions. *Brown Journal of World Affairs*, 16.2, (Spring/Summer), 2010.
- 29. **Corbett, J.J.**; Wang, H.; Winebrake, J.J., <u>The effectiveness and costs of speed reductions on emissions from international shipping</u>. *Transportation Research Part D: Transport and Environment*, 14, (8), 593-598, 2009.
- 30. Lauer, A.; Eyring, V.; Corbett, J.J.; Wang, C.; Winebrake, J.J., An assessment of near future policy instruments for international shipping: Impact on atmospheric aerosol burdens and the Earth's radiation budget. *Environmental Science and Technology*, **43**(15), 5992-5998, 2009.
- 31. Winebrake, J.J.; Corbett, J.J.; Green, E. H.; Lauer, A.; Eyring, V., Mitigating the Health Impacts of Pollution from International Shipping: An Assessment of Low-Sulfur Fuel Mandates. *Environmental Science and Technology*, doi: 10.1021/es803224q, 43(13), 4776-4782, 2009.
- 32. Eyring, V.; Isaksen, I. S. A.; Berntsen, T.; Collins, W. J.; Corbett, J.J.; Endresen, O.; Grainger, R. G.; Moldanova, J.; Schlager, H.; Stevenson, D. S., Transport Impacts on Climate and Ozone: Shipping. *Atmospheric Environment*, 44(37), Pages 4735–4771, webpublished 19 May, 2009, doi: 10.1016/j.atmosenv.2009.04.059, 2010.
- 33. Lack, D.; Corbett, J.J.; Onasch, T.; Lerner, B. M.; Massoli, P.; Quinn, P. K.; Bates, T. S.; Covert, D. S.; Coffman, D.; Sierau, B.; Herndon, S.; Allan, J.; Baynard, T.; Lovejoy, E.; Ravishankara, A. R.; Williams, E. J., Particulate Emissions from Commercial Shipping. Chemical, Physical and Optical Properties. Journal of Geophysical Research, 114 (D00F04), 2009.
- 34. A. S. M. Vanderlaan; **Corbett, J.J.**; S. L. Green,; J. A. Callahan; C. Wang; R. Kenney; C. T. Taggart; J. Firestone, Probability and Mitigation of Vessel Encounters with North Atlantic Right Whales. *Endangered Species Research*, **6**(3), p.273-285, 2009.
- 35. Winebrake, J.J.; Corbett, J.J.; Falzarano, A.; Hawker, J. S.; Korfmacher, K.; Ketha, S.; Zilora, S., Assessing Energy, Environmental, and Economic Tradeoffs in Intermodal Freight Transportation, *Journal of the Air & Waste Management Association*, 58(8), 2008.
- 36. **Corbett, J.J.**, J.J. Winebrake, Emissions Tradeoffs Among Alternate Marine Fuels: Total Fuel Cycle Analysis Of Residual Oil, Marine Gas Oil And Marine Diesel Oil, *Journal of the Air and Waste Management Association*, 58(4), 538-542, 2008.
- 37. Wang, C., **Corbett, J.J.**, and J. Firestone, Improving Spatial Representation of Global Ship Emissions Inventories, *Environmental Science & Technology*, **42**(1), p. 193-199, 2008.
- 38. Firestone, J., S.B. Lyons, C. Wang, and **J.J. Corbett**, Statistical Modeling of North Atlantic Right Whale Migration along the Mid-Atlantic Region of the Eastern Seaboard of the United States, *Biological Conservation*, **141**(1), p. 221-232, 2008.
- 39. **Corbett, J.J.**, J.J. Winebrake, E.H. Green, P. Kasibhatla, V. Eyring, and A. Lauer, Mortality from Ship Emissions: A Global Assessment, *Environmental Science & Technology*, **41**(24), 8512–8518, 2007. *Recognized by ACS Publications as a Most-Accessed Article for 4th quarter 2007*, 1st quarter 2008, and for the full year 2007.
- 40. Wang, C., **J.J. Corbett**, and J.J. Winebrake, Cost-effectiveness of Reducing Ship Sulfur Emissions, *Environmental Science & Technology*, **41**(24), 8233–8239, 2007. *Recognized by ACS Publications as a Most-Accessed Article for 4th quarter* 2007.
- 41. **Corbett, J.J.**, and J.J. Winebrake, Sustainable Movement of Goods: Energy and Environmental Implications of Trucks, Trains, Ships, and Planes, *Environmental Management*, November: p 8-12, 2007.
- 42. Wang, C., and **J.J. Corbett**, The Costs and Benefits of Reducing SO₂ Emissions from Ships in the US West Coastal Waters, *Transportation Research Part D*, **12**(8): p. 577-588, 2007. *One of the "Top 25 Hottest Articles" in this journal for October-December 2007, and January-March 2008.*
- 43. Wang, C., **J.J. Corbett**, and J. Firestone, Modeling Energy Use and Emissions from North American Shipping: Application of the Ship Traffic, Energy, and Environment Model, *Environmental Science and Technology*, 41 (9), 3226-3232, 2007.
- 44. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, Energy Use and Emissions from Marine Vessels: A Total Fuel Cycle Approach, *Journal of Air and Waste Management*, **57**(January), 102-110, 2007.

- 45. **Corbett, J.J.**, and D.S. Chapman, An Environmental Decision Framework Applied to Marine Engine Control Technologies, *Journal of Air and Waste Management*, **56**(June), 841-851, 2006.
- 46. Schuster, T., J.B. Byrne, **J.J. Corbett**, and Y. Schreuder, Assessing the Potential Extent of Carsharing in the United States: A New Method and Its Implications, *Transportation Research Record*, 1927, 2005.
- 47. Wang, C., and **J.J. Corbett**, Geographical Characterization of Ship Traffic and Emissions, *Transportation Research Record*, 1909, 2005.
- 48. Firestone, J., and **J.J. Corbett**, Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species, *Ocean Development and International Law*, **36**(3), 291-316, 2005. Condensed for republication in: Firestone, J., and J.J. Corbett, Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species, *Sustainable Development Law & Policy*, *VII* (1 (Fall 2006)), 45-49, 2006.
- 49. Winebrake, J.J., **J.J. Corbett**, C. Wang, A.E. Farrell, and P. Woods, Optimal Fleetwide Emissions Reductions for Passenger Ferries: An Application of a Mixed-Integer Nonlinear Programming Model for the New York-New Jersey Harbor, *Journal of Air & Waste Management*, **55**(4), 458–466, 2005.
- 50. Chen, G., L.G. Huey, M. Trainer, D. Nicks, J.J. Corbett, T. Ryerson, D. Parrish, J.A. Neuman, J. Nowak, D. Tanner, J. Holloway, C. Brock, J. Crawford, J.R. Olson, A. Sullivan, R. Weber, S. Schauffler, S. Donnelly, E. Atlas, J. Roberts, F. Flocke, G. Hübler, and F. Fehsenfeld, An Investigation of the Chemistry of Ship Emission Plumes during ITCT 2002, *Journal of Geophysical Research Atmospheres*, 110(D10), 2005.
- 51. Theis, M., N.D. Cass, J.B. Byrne, and **J.J. Corbett**, The Role of Technology in Achieving Environmental Policy Goals in the MTS, *Transportation Research Record*, *1871*, 42-49, 2004.
- 52. Gurian, P.L., and **J.J. Corbett**, Inland Sulfate Deposition in North America from Marine Emissions, *Transportation Research Record*, *1871*, 50-54, 2004.
- 53. **Corbett, J.J.**, and H.W. Koehler, Considering Alternative Input Parameters In An Activity-Based Ship Fuel Consumption And Emissions Model, *Journal of Geophysical Research Atmospheres*, **109**(D23303), 2004.
- 54. **Corbett, J.J.**, and H.W. Koehler, Updated Emissions from Ocean Shipping, *Journal of Geophysical Research Atmospheres*, **108**(D20), doi:10.1029/2003JD003751, 4650-4666, 2003.
- 55. **Corbett, J.J.**, New Directions: Designing Ship Emissions and Impacts Research to Inform Both Science and Policy, *Atmospheric Environment*, **37**(33): 4719-4721, 2003.
- 56. Farrell, A., D. H. Redman, **J.J. Corbett**, J.J. Winebrake, Comparing Air Pollution From Ferry and Landside Commuting, *Transportation Research D: Energy and Environment*, **8**(5): 343-360, 2003.
- 57. Farrell, A., D.W. Keith, and **J.J. Corbett**, A Strategy for Introducing Hydrogen into Transportation, *Energy Policy*, **31**(13): 1357-1367, 2003.
- 58. Firestone, J., and **J.J. Corbett**, Maritime Transportation: A Third Way For Port And Environmental Security, *Widener Law Symposium Journal*, **9**(2): 419-437, 2003.
- 59. Farrell, A., **J.J. Corbett**, J.J. Winebrake, Controlling Air Pollution from Passenger Ferries: Cost Effectiveness of Seven Technological Options, *Journal of the Air & Waste Management Association*, **52**(Dec): 1399-1410, 2002.
- 60. **Corbett, J.J.**, and P.S. Fischbeck, Commercial Marine Emissions and Life-Cycle Analysis of Retrofit Controls in a Changing Science and Policy Environment, *Naval Engineers Journal*, **114**(1):93-106, 2002.
- 61. **Corbett, J.J.**, Emissions from Ships in the Northwestern United States, *Environmental Science & Technology*, **36**(6): 1299-1306, 2002.
- 62. **Corbett, J.J.**, and A. Farrell, Mitigating Air Pollution Emissions From Ferries, *Transportation Research D: Energy and Environment*, **7**(3), 197-211, 2002.
- 63. **Corbett, J.J.**, and A.L. Robinson, Measurements of NOx Emissions and In-Service Duty Cycle from a Towboat Operating on the Inland River System, *Environmental Science & Technology*, **35**(7), 1343-1349, 2001.
- 64. Kasibhatla, P., H. Levy, W.J. Moxim, S.N. Pandis, **J.J. Corbett**, M.C. Peterson, R.E. Honrath, G.J. Frost, K. Knapp, D.D. Parrish, and T.B. Ryerson, Do Emissions from Ships Have a Significant Impact on Concentrations of Nitrogen Oxides in the Marine Boundary Layer?, *Geophysical Research Letters*, **27**(15), 2229-2233, 2000.
- 65. **Corbett, J.J.**, and P.S. Fischbeck, Emissions from Waterborne Commerce in United States Continental & Inland Waters, *Environmental Science and Technology*, **34**(15), 3254-3260, 2000.
- 66. Capaldo, K.P., **J.J. Corbett**, P. Kasibhatla, P. Fischbeck, S.N. Pandis, Effects of Ship Emissions on Sulphur Cycling and Radiative Climate Forcing Over the Ocean, *Nature*, **400**, 743-746, 1999.
- 67. **Corbett, J.J.**, P.S. Fischbeck, S.N. Pandis, Global Nitrogen and Sulfur Emissions Inventories for Oceangoing Ships, *Journal of Geophysical Research*, **104**(D3), 3457-3470, 1999.
- 68. Corbett, J.J., P.S. Fischbeck, Emissions from Ships, Science, 278(5339), 823-824, 1997.

BOOK CHAPTERS

- 1. **Corbett, J.J.** and J.J. Winebrake (2018). Environmental issues in international trade and transportation. Handbook of International Trade and Transportation. B. A. Blonigen and W. Wilson, Edward Elgar Publishing.
- 2. **Corbett, J.J.**, The Maritime Sector's Role in Meeting Trade and Environment Goals. In Trade in the Balance: Reconciling Trade and Climate Policy, Gallagher, K. P., Ed. Trustees of Boston University: Boston, MA, 2016.
- 3. **Corbett, J.J.**, and J.J. Winebrake, Freight Transportation and the Environment, in Intermodal Transportation: Moving Freight in a Global Economy, edited by Michael D. Meyer and Gen Giuliano, Eno Transportation Foundation, Washington, D.C., 2011.
- 4. **Corbett, J.J.**; Winebrake, J.J.; Endresen, Ø.; Eide, M.; Dalsøren, S.; Isaksen, I. S.; Sørgård, E., *International Maritime Shipping: The Impact of Globalisation on Activity Levels*. In Globalisation, Transport and the Environment, Braathen, N.-A., Ed. Organization for Economic Cooperation and Development: Paris, 2010; pp 55-79.
- 5. van Dender, K.; Crist, P.; Corbett, J.J.; Winebrake, J.J., *Policy Instruments to Limit Negative Environmental Impacts: An Economic Perspective*. In Globalisation, Transport and the Environment, Braathen, N.-A., Ed. Organization for Economic Cooperation and Development: Paris, 2010; pp 225-248.
- 6. Winebrake, J.J.; **Corbett, J.J.**, Chapter 13: Improving the Energy Efficiency and Environmental Performance of Goods Movement. In *Climate and Transportation Solutions: Findings from the 2009 Asilomar Conference on Transportation and Energy Policy*, Sperling, D.; Cannon, J., Eds. Institute of Transportation Studies, University of California, Davis; Sacramento, CA, 2010.
- 7. **Corbett, J.J.**, and J.J. Winebrake, International Trade and Global Shipping, in *Handbook on Trade and Environment*, edited by K.P. Gallagher, Edward Elgar Publishing, Northampton, MA, 2008.
- 8. Benkovitz, C.M., H. Akimoto, **J.J. Corbett**, J.D. Mobley, J. Olivier, J.V. Aardenne, and V. Vestreng, Compilation of Regional to Global Inventories of Anthropogenic Emissions, in *Emissions of Atmospheric Trace Compounds*, ed. C. Granier, P. Artaxo, and C. Reeves, pp. 545, Kluwer Academic Publishing, 2004.
- 9. **Corbett, J.J.**, Marine Transportation and Energy Use, in *Encyclopedia of Energy*, edited by C. J. Cleveland. San Diego, CA, Elesvier Science, 2004.
- 10. **Corbett, J.J.**, The Marine Transportation System, *Handbook of Transportation Engineering*, edited by M. Kutz, New York, NY, McGraw-Hill, 2003.
- 11. **Corbett, J.J.**, Marine Transportation and Global Climate Change, in *Global Climate Change and Transportation: Coming to Terms*, pp. 131-142, Eno Transportation Foundation, Washington, DC, 2002.
- 12. **Corbett, J.J.**, and P.S. Fischbeck, International Technology-Policy: Challenges in Regulating Ship Emissions, in *Improving Regulation: Cases in Environment, Health and Safety*, ed. S. Farrow, and P.S. Fischbeck, RFF Press, Washington, DC, 2001.

CONFERENCE PAPERS

- 1. M. Viana, V. Rizza, A. Tobías, E. Carr, J. Corbett, M. Sofiev, A. Karanasiou, G. Buonanno and N. Fann, Estimated health impacts from maritime transport in the Mediterranean region and benefits from the use of cleaner fuels, Oral presentation, European Aerosol Conference 2020, Aachen (Germany), 31 August-3 September 2020.
- 2. Corbett, J.J., Cost-Benefit Analysis of Potential US Ballast-Water Management Policies, American Association for the Advancement of Science (AAAS), 2020 Annual Meeting, Seattle, Washington, February 2020.
- 3. Carr, E. W.; **Corbett, J.J.**, Switching from MGO to LNG: Assessment of Potential Emissions from LNG as a Marine Fuel in the Inland Rivers, Paper 16-6317. In Transportation Research Board 95th Annual Meeting, National Academies of Science, Engineering, Medicine: Washington, DC, 2016.
- 4. Deiner, K.; Chawla, N.; Leister, A.; Wickramarathne, T.; Grey, E.; Xu, J.; Corbett, J.; Pfrender, M.; Warziniack, T.; Li, Y. In Using environmental DNA to track non-indigenous species in shipping ports, GENOME, 2015; Canadian Science Publishing, NRC Research Press, Ottawa, Ontario, Canada: 2015; pp 210-210.
- 5. **Corbett, J.J.**, Browse, J., Carslaw, K.S., Schmidt, A., Impact of future Arctic shipping on high-latitude black carbon deposition, Control ID: 1802374, 2013 AGU Annual Meeting, December 2013.
- 6. Firestone, J., Samoteskul, K., **Corbett, J.J.**, Callahan, J., MSP: Vessel Traffic Rerouting To Hasten Offshore Wind Power Development And Enhance Net Societal Benefits, AWEA Offshore Wind Power Conference, Providence, RI, November 2013.
- Samoteskul, K., Firestone, J., Callahan, J., and Corbett, J.J., Analysis of Vessel Traffic Rerouting Scenarios to Open Areas for Offshore Wind Development Reveals Significant Societal Benefits, AGU Science and Policy Meeting, Washington, DC, June 2013.
- 8. Samoteskul, K., Firestone, J., Callahan, J., and **Corbett, J.J.**, Costs and Benefits of Rerouting Vessel Traffic to Open Shallow Waters for Offshore Wind Development, WINDPOWER 2013, Chicago, IL, May 2013.
- 9. Winebrake, J.J., Corbett, J.J., Finding interventions that align green freight goals with supply chains, in CGW13-

- 008 Assessing the Future of Freight: Energy and Environmental Modeling in the Freight Sector, TRB Annual Meeting, Washington, DC, January 2013.
- 10. Mokashi, A., Corbett, J.J., Marine Highway Stakeholders, and Their Relations, TRB Annual Meeting, Washington, DC, January 2013.
- 11. Samoteskul, K., Firestone, J., Callahan, J., and **Corbett, J.J.**, Costs and Benefits of Rerouting Vessel Traffic to Open Shallow Waters for Offshore Wind Development, AWEA Offshore Wind Power Conference, Virginia Beach, VA, October 2012.
- 12. **Corbett, J.J.**, Lack, D.A., Arctic Shipping Policy and Polar Code Protections, Control ID: 1366222, 2012 AGU Science Policy Conference, 30 April 3 May 2012.
- 13. Bailey, D.; Holland, M.; Lack, D.; Lamarque, J.-F.; Flanner, M.; **Corbett, J.J.**, Potential impacts of 21st century Arctic shipping. In World Climate Research Programme: Climate Research in Service to Society, Sheraton Denver Downtown Hotel, Denver, CO, USA, 2011; Vol. Session: C11 Poster: M126B, 24-28 October, 2011.
- 14. Hawker, J. S.; Comer, B.; Corbett, J.J.; Ghosh, A.; Korfmacher, K.; Lee, E. E.; Li, B.; Prokop, C.; Winebrake, J.J. In *An Integrated Model to Study Environmental, Economic, and Energy Trade-offs in Intermodal Freight Transportation*, The International Environmental Modeling and Software Society (iEMSs) 2010, Ottawa, Canada, 5-8 July 2010, 2010; International Environmental Modeling and Software Society: Ottawa, Canada, 2010.
- 15. **Corbett, J.J.**, Wang, H., Winebrake, J.J., The Impacts of Speed Reductions on Vessel-Based Emissions for International Shipping, Paper Number: 09-3742, in 88th Annual Meeting of the Transportation Research Board, Washington, DC, January 2009.
- 16. **Corbett, J.J.**, Winebrake, J.J.; Gold, M.; Harder, S., Emissions from International Shipping in the Arctic. In 2008 Fall Meeting of the American Geophysical Union (AGU), American Geophysical Union: San Francisco, CA, 2008; Vol. A11A-0079.
- 17. Lack, D. A.; **Corbett, J.J.**; Onasch, T.; Lerner, B. M.; Massoli, P.; Quinn, P. K.; Bates, T. S.; Covert, D. S.; Sierau, B.; Herndon, S.; Allan, J.; T., B.; Lovejoy, E.; Ravishankara, A. R.; Williams, E. J., Particulate Emissions from Commercial Shipping. Chemical, Physical and Optical Properties, In *2008 Fall Meeting of the American Geophysical Union (AGU)*, San Francisco, California, 2008; American Geophysical Union: San Francisco, California, 2008.
- 18. **Corbett, J.J.**, and J.J. Winebrake, The impact of globalisation on international maritime transport activity: Past trends and future perspectives, in *OECD/ITF Global Forum on Sustainable Development: Transport And Environment In a Globalising World*, Guadalajara, Mexico, November 2008.
- 19. Winebrake, J.J., **J.J. Corbett**, A. Falzarano, J.S. Hawker, K. Korfmacher, S. Ketha, and S. Zilora, Minimizing Energy And Environmental Impacts Of Intermodal Freight Transport: Development And Application Of A Geospatial Routing Tool, in *87th Annual Meeting of the Transportation Research Board*, Washington, DC, 2008.
- 20. Falzarano, A., S.S. Ketha, J.S. Hawker, K. Korfmacher, J.J. Winebrake, S. Zilora, and **J.J. Corbett**, Development of an Intermodal Network for Freight Transportation Analysis, Paper UC1488, in *2007 ESRI International User Conference*, ESRI, San Diego, CA, 2007.
- 21. Wang, C., **J.J. Corbett**, and J. Callahan, Geospatial Modeling of Ship Traffic and Air Emissions, Paper UC1683, in *2007 ESRI International User Conference*, ESRI, San Diego, CA, 2007.
- 22. Winebrake, J.J., J.S. Hawker, **J.J. Corbett**, A. Falzarano, S. Ketha, K. Korfmacher, and S. Zilora, A Geospatial Intermodal Freight Transport Model for Energy and Environmental Analyses, in *Transportation Research Board, Transportation Land Use, Planning, Air Quality Conference*, Orlando, FL, 2007.
- 23. Weber, C.L., H.S. Matthews, J.J. Corbett, and E.D. Williams, Carbon Emissions Embodied in Importation, Transport and Retail of Electronics in the U.S.: A Growing Global Issue, in 2007 IEEE International Symposium on Electronics and the Environment and the Electronics Recycling Summit, IEEE Computer Society Technical Committee On Electronics & The Environment And The International Association Of Electronics Recyclers, Orlando, FL, 2007.
- 24. **Corbett, J.J.**, J.J. Winebrake, and E. Green, Evaluating Container Fee Impacts on Port Choice: A Case Study of the Ports of Los Angeles, Long Beach, and Oakland, Paper No. 07-2347, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
- 25. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, A Total Fuel Life-Cycle Analysis Of Energy And Emissions From Marine Vessels, Paper No. 07-0817, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
- 26. Wang, C., and **J.J. Corbett**, A Preliminary Estimation of Costs and Benefits for Reducing Sulfur Emissions from Cargo Ships in the U.S. West Coastal Waters, Paper 07-3402, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
- 27. Wang, C., S.B. Lyons, **J.J. Corbett,** and J. Firestone, Using ship speed and mass to describe potential collision with whales: An application of the Ship Traffic, Energy and Environment Model (STEEM), Paper 07-2368 (accepted), in

- Transportation Research Board 86th Annual Meeting, Transportation Research Board, Washington, DC, 2007.
- 28. Lindhjem, C.E., J. Russell, and **J.J. Corbett**, Development of Gridded Ocean-going Vessel Emission Inventories, in *15th Annual International Emission Inventory Conference*, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions Inventory Group, New Orleans, 2006.
- 29. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, Total Fuel-Cycle Emissions for Marine Vessels: A Well-to-Hull Analysis with Case Study, in *13th CIRP International Conference on Life Cycle Engineering, LCE2006*, Leuven, Belgium, 2006.
- 30. Wang, C., and **J.J. Corbett**, Demonstration of An Enhanced Activities Approach for Producing Spatially Resolved Ship Emission Inventories, in *Marine Environmental Engineering Technology Symposium 2006*, American Society of Naval Engineers & Society of Naval Architects and Marine Engineers, Washington, DC, 2006.
- 31. Wang, C., and **J.J. Corbett**, Adapting Bottom-up Methods to Top-down Spatially Resolved Ship Emissions Inventories, in *Transportation Research Board 85th Annual Meeting*, Transportation Research Board of the National Academies, Washington, DC, Reviewed Paper No. 06-1253, 2006.
- 32. **Corbett, J.J.**, and D.S. Chapman, Decision Framework for Emission Control Technology Selection, in *84th Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 05-1804, Washington, DC, 2005.
- 33. Wang, C., and **J.J. Corbett**, Geographical Characterization of Ship Traffic and Emissions, in 84th Annual Meeting of the Transportation Research Board, Reviewed Paper No. 05-1654, Washington, DC, 2005.
- 34. Schuster, T., J.B. Byrne, **J.J. Corbett**, and Y. Schreuder, TRB Paper: Assessing the Potential Extent of Carsharing in the United States: A New Method and Its Implications, in *84th Annual Meeting if the Transportation Research Board*, Reviewed Paper No. 05-2144, Washington, DC, 2005.
- 35. Billings, R., R. Chang, H. Perez, **J.J. Corbett**, and S. Wells, Proposed Enhancements to the Mineral Management Service Commercial Marine Vessel Emission Inventory for the Gulf of Mexico, in *13th International Emission Inventory Conference*, pp. 12, U.S. EPA Emission Factors and Inventory Group; Emission Inventory Improvement Program; Emissions, Monitoring and Analysis Division; Office of Air Quality Planning & Standards, Clearwater, FL, 2004.
- 36. Farrell, A.E., **J.J. Corbett**, D.H. Redman, and J.J. Winebrake, Air Quality Impacts of Passenger Ferry Service, in 83rd Annual Meeting of the Transportation Research Board, Reviewed Paper No. 04-3134, Washington, DC, 2004.
- 37. Gurian, P.L., and **J.J. Corbett**, Inland Sulfate Deposition in North America from Marine Emissions, in 83rd Annual Meeting of the Transportation Research Board, Reviewed Paper No. 04-2588, Washington, DC, 2004.
- 38. Theis, M., N.D. Cass, J.B. Byrne, and **J.J. Corbett**, The Role of Technology in Achieving Environmental Policy Goals in the MTS, in 83rd Annual Meeting of the Transportation Research Board, Reviewed Paper No. 04-2901, Washington, DC, 2004.
- 39. Robert Behr, Daniel Gore, Jonathan DeHart, Gregory Thompson, Mridul Gautam, Nigel Clark, William Remley, **James Corbett**, Advocating the Development of Universal Onboard Marine Emission Measurement Protocols, *Marine Environmental Engineering Technical Symposium (MEETS) 2003*, SNAME/ASNE, Washington, DC, 20-21 2003
- 40. **Corbett, J.J.**, D.K. Nicks Jr., J.S. Holloway, T.B. Ryerson, J.A. Neuman, J.B. Nowak, C.A. Brock, M. Trainer, G. Hubler, D.D. Parrish, K.K. Perkins, E. Dunlea, D.T. Sueper, F.C. Fehsenfeld, Measurements of Marine Vessel Emissions and Resulting Plume Chemistry Off of the California Coast During ITCT, *Eos Transactions of AGU Fall Meeting*, **83**(47): Abstract A62B-0160, San Francisco, CA, 6-10 December, 2002.
- 41. Farrell, A., **J.J. Corbett**, and J.J. Winebrake, Controlling Air Pollution from Passenger Ferries: Cost Effectiveness of Seven Technological Options, Reviewed Paper No. 02-2651 in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
- 42. Farrell, A., D.H. Redman, **J.J. Corbett**, and J.J. Winebrake, Air Pollution from Matching Water- and Land-Based Travel: Implications for Passenger Ferries in the San Francisco Bay, Reviewed Paper No. 02-2644 in *TRB* 81st Annual Meeting, TRB, Washington, DC, 2002.
- 43. Farrell, A., D. Keith, and **J.J. Corbett**, Adaptive Management of Technological Change: Strategy for Introducing Hydrogen into Transportation, in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
- 44. Farrell, A., D. Keith, and **J.J. Corbett**, A Strategy for Introducing Hydrogen into Transportation, in *Transportation*, in *Transportation*, Energy, and Environmental Policy: Managing Transitions, edited by D. Sperling, and K. Kurani, pp. 142-160, Transportation Research Board of the National Academies, VIII Biennial Asilomar Conference, 2001.
- 45. Farrell, A., D.W. Keith, and **J.J. Corbett**, Infrastructure and Technological Innovation: Fueling Hydrogen Vehicles, in 5th Int'l. Conf. on Technology Policy and Innovation, Delft, The Netherlands, June 2001.
- 46. **Corbett, J.J.**, A Waterborne Commerce Inventory Integrating Economic, Transportation and Emissions Data, in *International Emissions Inventory Conference: One Atmosphere, One Inventory, Many Challenges*, Denver, 2001.
- 47. **Corbett, J.J.**, and P.S. Fischbeck, Commercial Marine Emissions and Life-Cycle Analysis of Retrofit Controls in a Changing Science and Policy Environment, in *Marine Environmental Engineering Technology Symposium*,

- SNAME/ASNE, Arlington, VA, May 2001.
- 48. **Corbett, J.J.**, and J. McCown, Reducing Emissions From Cargo Transport And Improving Air Quality Between Mainland U.S. & Puerto Rico Through Distillate Fuel Choice, in *Inter-American Association of Engineering and Environmental Science*, Brazil, December 2000.
- 49. **Corbett, J.J.**, D.W. Keith, and A. Farrell, Towards True Zero-emission Vehicles in a Single Step: Air Pollution and Greenhouse Gas Reductions Through Hydrogen Fueled Ships with Carbon Management, in *Oceans 2000*, Marine Technical Society (MTS)/IEEE Oceanic Engineering Society, Providence, RI, September 2000.
- 50. Farrell, A., D.W. Keith, and **J.J. Corbett**, Minimizing the Costs of CO₂ Control in the Transportation Sector: Fuel Cells and Carbon Management, in *US Association for Energy Economics Annual Meeting*, Philadelphia, PA, 2000.
- 51. Keith, D.W., A. Farrell, and **J.J. Corbett**, True Zero-Emission Vehicles in a Single Step: Hydrogen Fueled Ships with Carbon Management, in *Fifth International Conference on Greenhouse Gas Control Technologies*, Cairns, Australia, September 2000.
- 52. **Corbett, J.J.**, K.P. Capaldo, P. Kasibhatla, and S.N. Pandis, A Global Sulfur Emissions Inventory For Oceangoing Ships And Its Impact In Global Chemical Transport Models, in *International Aerosol Conference*, edited by Journal of Aerosol Science, pp. S613-S614, Elsevier Science Ltd., Edinburgh, Scotland, 1998.
- 53. **Corbett, J.J.**, and P.S. Fischbeck, Ship Air Emissions: Estimation and Regulation, in *1997 Diesel Engine Emissions Reduction (DEER) Workshop Proceedings*, U.S. Department of Energy, Office of Transportation Technologies, Assist. Sec. for Energy Efficiency and Renewable Energy, UCSD San Diego, CA, pp. 39-43, 1997.
- 54. Koerner, C.E., J.A. Rogalla, **J.J. Corbett**, of Radian Corporation, and Varnadore, D.J., of McClellan AFB, "Discrete Interval Groundwater Sampler," *Hazardous Waste Consultant*, September/October 1992.

REPORTS

- 1. Schenk, E., Carr, E.W., Corbett, J.J., Winebrake, J.J., Impacts of Electrification: Four Port Case Studies, U.S. Department of Transportation, Maritime Administration, July 2020.
- 2. Green, E.H., Carr, E.W., Winebrake, J.J, Corbett, J.J., Blockchain Technology and Maritime Shipping: A Primer, U.S. Department of Transportation, Maritime Administration, June 2020.
- 3. **Corbett**, J.J., Carr, E.W., White Paper "IMO 2020: Good for the United States", Coalition for American Energy Security, Energy & Environmental Research Associates, 14 May 2019.
- 4. **Corbett, J. J.**, & Carr, E. W. (2019). *Technical and feasibility study to examine the possibility of designating the Mediterranean Sea, or parts thereof, as SOx ECA(s) under MARPOL Annex VI*. REMPEC/WG.45/INF.9, 24 May 2019, Retrievable from http://www.rempec.org/rempec.asp?pgeVisit=New&theID=13.
- 5. **Corbett, J. J.,** & Winebrake, J. J. (n.d.). *Lifecycle Analysis of the Use of Methanol for Marine Transportation*. Washington D.C. Retrieved from https://www.maritime.dot.gov/innovation/meta/lifecycle-analysis-use-methanol-marine-transportation
- 6. **Corbett, J.J.**, Winebrake, J.J., Carr, E.W., Jalkanen, J-P, Johansson, L., Prank, M., Sofiev, M., Winebrake, S.G., Karppinen, A., Report to the IMO Marine Environment Protection Committee, MEPC 70/INF.34, submitted by Finland, "Study on effects of the entry into force of the global 0.5% fuel oil sulphur content limit on human health," London, UK, 19 August, 2016.
- 7. **Corbett, J.J.**; Johnstone, N.; Strodel, K.; Laurent, D., <u>Environmental Policy and Technological Innovation in Shipbuilding</u>. OECD Publishing: Paris, France, 2016; p 54.
- 8. **Corbett, J.J.**; Thomson, H.; Winebrake, J.J. <u>Methane Emissions from Natural Gas Bunkering Operations in the Marine Sector: A Total Fuel Cycle Approach</u>; U.S. Department of Transportation, Maritime Administration: Washington, DC, November 2015.
- 9. Hendrickson, C. T.; Boske, L. B.; Bronzini, M. S.; **Corbett, J.J.**; Dickey, G. E.; Kruse, C. J.; McMullen, B. S.; Shabman, L., A.; Wakeman, T. H.; Committee on Reinvesting in Inland Waterways; Funding and managing the U.S. inland waterways system: what policy makers need to know, Special Report 315. Washington, DC, 2015; p 212.
- 10. Risch, C.; Shanard, J.; Copley, A.; Matthews, J.; Carr, E. W.; **Corbett, J.J.** Evaluation of Inland Maritime Use of LNG in UTC Region 3, Final Report; Mid-Atlantic Transportation Sustainability University Transportation Center (MATS UTC): Charlottesville, VA. July 2015; p 68.
- 11. Smith, T. W. P.; Jalkanen, J. P.; Anderson, B. A.; **Corbett, J.J.**; Faber, J.; Hanayama, S.; O'Keeffe, E.; Parker, S.; Johansson, L.; Aldous, L.; Raucci, C.; Traut, M.; Ettinger, S.; Nelissen, D.; Lee, D. S.; Ng, S.; Agrawal, A.; Winebrake, J.J.; Hoen, M.; Chesworth, S.; Pandey, A. *Third IMO GHG Study 2014*; International Maritime Organisation (IMO): London, June 2014.
- 12. **Corbett, J.J.**, Thomson, H., Winebrake, J.J., Natural Gas for Waterborne Freight Transport: A Life Cycle Emissions Assessment with Case Studies, for the U.S. Department of Transportation, Maritime Administration; URL: http://www.marad.dot.gov/documents/Total_Fuel_Cycle_Analysis_for_LNG.pdf, July 2014.
- 13. Corbett, J.J., US GHG Inventory 90-12 Expert Review, University of Delaware, January 2014.

- 14. **Corbett, J.J.**, Comer, B. (2013). *Clearing the air: Would shoreside power reduce air pollution emissions from cruise ships calling on the Port of Charleston, SC?* Pittsford, NY: Energy and Environmental Research Associates.
- 15. **Corbett, J.J.**, Winebrake, J.J., Thomson, H., A Comparative Analysis of Air Emissions from Alternative Fuel Transport via the SS Badger v. Trucks to Transport Cargo along the Great Lakes, Sustainable Intermodal Freight Transport Research Program, Great Lakes Maritime Research Institute, University of Wisconsin-Superior, December 2012.
- 16. **Corbett, J.J.**, Deans, E., Silberman, J., Emissions Changes from Containerized Cargo Shifts through an Expanded Panama Canal, Prepared for Environmental Defense Fund, GIFTSolutions LLC, 27 February 2012.
- 17. Corbett, J.J., Green, E., Silberman, J., Battegliese, T., Transferability of Protocols and Results Across U.S-Mexico Border Crossings, Task 3e of DTFH61-11-D-00030-T11-002 (EN 1002): Emissions and Border Wait-Time Analysis Support, Cambridge Systematics project for Federal Highways Administration, US DOT, April 2012.
- 18. Comer, B.; Silberman, J. A.; Corbett, J.J.; Stella, G. Commercial Marine Emissions in the LADCO Region Final Report Rosemont, IL, 16 September, 2011.
- 19. **Corbett, J.J.**; Winebrake, J.J.; Green, E. H.; Comer, B. *Energy and GHG Emissions Savings Analysis of Fluropolymer Foul Release Hull Coating*; International Paint: Tyne & Wear, United Kingdom, 16 November, 2010.
- 20. Green, E. H.; Silberman, J. A.; Comer, B.; Winebrake, J.J.; **Corbett, J.J.** *Mortality in Latitudes 40°N and Above from Primary Particulate Matter Emissions by Shipping*; Prepared for the Clean Air Task Force: Boston, MA, USA, submitted to the International Maritime Organization (MEPC 62/4/16), 25 April, 2011.
- 21. **Corbett, J.J.**; Hawker, J. S.; Winebrake, J.J. *Development of a California Geospatial Intermodal Freight Transport Model with Cargo Flow Analysis: Final Report*; University of Delaware and Rochester Institute of Technology: Newark, DE, 6 December 2010, 2010.
- 22. **Corbett, J.J.**; Winebrake, J.J.; Green, E.; Comer, B. *Energy and GHG Emissions Savings Analysis of Fluoropolymer Foul Release Hull Coating*; Energy and Environmental Research Associates: Pittsford, NY, 10 December 2010, 2010; p 21.
- 23. Mokashi, A. J.; Corbett, J.J. *Prioritized Actions for Issuance of MARAD's Environmental Award*; University of Delaware: Newark, DE, 19 November 2010, 2009; p 58.
- 24. Winebrake, J.J.; Corbett, J.J.; Comer, B.; Green, E.; Silberman, J. A.; Korfmacher, K. *Analysis of Impacts of Category 3 Marine Rule on Great Lakes Shipping*; Energy and Environmental Research Associates: Pittsford, NY, 4 November 2010, 2010; p 101.
- 25. **Corbett, J.J.**; Ghosh, A.; Hawker, J. S.; Korfmacher, K.; Lee, E. E.; Silberman, J.; Winebrake, J.J. *Infrastructure Performance Improvement to Reduce Corridor Delays for Freight Flows: Application of Geospatial Intermodal Freight Transportation Model, Study Design Memorandum: Milestone for Task I Assess System Performance Measures; University of Delaware and Rochester Institute of Technology: Newark, DE, 3 November 2010, 2010.*
- 26. Winebrake, J.J.; Green, E. H.; Corbett, J.J. Feedstock Transportation and Logistics Energy and Environmental Research Associates (EERA): Pittsford, NY, March, 2010
- 27. **Corbett, J.J.** *Improved Geospatial Scenarios for Commercial Marine Vessels*; California Air Resources Board: Sacramento, CA, March 2010, 2010.
- 28. Contributing author, Cambridge Systematics, et al., *U.S. Department of Transportation Report to Congress on Transportation's Role in Reducing U.S. Greenhouse Gas Emissions*, U.S. Federal Highways Administration, 2010. The Energy Independence and Security Act of 2008 mandates that the US DOT produce a report to Congress on transportation's impact on climate change. The study considers co-benefits of fuel savings and air quality improvement, in coordination with the US EPA and the US Global Change Research Program.
- 29. Briggs, D.; Dalton, S.; Lee, E. E.; **Corbett, J.J.** Intermodal Freight Transport Along the East Coast: Development and Application of the Geographic Intermodal Freight Transport Model; University of Delaware: Newark, DE, 2009.
- 30. Winebrake, J.J.; Green, E. H.; Corbett, J.J., Rail Electrification, Phase I: Options and Opportunities for Rail Electrification in the U.S.; Energy and Environmental Research Associates: Pittsford, NY, November 2009, 2009; p 37.
- 31. **Corbett, J.J.**; Korfmacher, K.; Lee, E. E.; Hawker, J. S.; Winebrake, J.J.; Comer, B.; Ghosh, A.; Prokop, C. *Infrastructure Performance Improvement to Reduce Corridor Delays for Freight Flows: Task I Assess System Performance Measures*; University of Delaware and Rochester Institute of Technology: Newark, DE, 2009.
- 32. **Corbett, J.J.**; Hawker, J. S.; Winebrake, J.J. *Development of a California Geospatial Intermodal Freight Transport Model with Cargo Flow Analysis, Task 1 Deliverable: Refined Research Plan*; University of Delaware and Rochester Institute of Technology: Newark, DE, 2009.
- 33. Mokashi, A. J.; Corbett, J.J.; Lee, E. E. Actions recommended for the issuance of MARAD's environmental award. Final Phase I Report; University of Delaware: Newark, DE, 2009.

- 34. Buhaug, Ø.; Corbett, J.J.; Eyring, V.; Endresen, Ø.; Faber, J.; Hanayama, S.; Lee, D. S.; Lee, D.; Lindstad, H.; Markowska, A. Z.; Mjelde, A.; Nelissen, D.; Nilsen, J.; Pålsson, C.; Wanquing, W.; Winebrake, J.J.; Yoshida, K. *Control of Greenhouse Gas Emissions from Ships Engaged in International Trade*; International Maritime Organization: Copenhagen, Denmark, 7-18 December 2009, 2009; p 32.
- 35. **Corbett, J.J.**, contributing author to Environmental Considerations and Impacts Chapter of the *Arctic Marine Shipping Assessment 2009 Report*. Arctic Council, April 2009. Coordinating Lead Authors:; Brigham, L.; McCalla, R.; Cunningham, E.; Barr, W.; Vanderzaag, D.; Santos-Pedro, V.; MacDonald, R.; Harder, S.; Ellis, B.; Snyder, J.; Huntington, H.; Skjoldal, H.; Gold, M.; Williams, M.; Wojhan, T.; Falkingham, J.
- 36. Buhaug, Ø.; Corbett, J.J.; Endresen, Ø.; Eyring, V.; Faber, J.; Hanayama, S.; Lee, D. S.; Lee, D.; Lindstad, H.; Mjelde, A.; Pålsson, C.; Wanquing, W.; Winebrake, J.J.; Yoshida, K. Second IMO Greenhouse Gas Study 2009; International Maritime Organization: London, 30 March, 2009.
- 37. Winebrake, J.J.; Corbett, J.J. SAFE-Ships Analysis of an Energy Efficiency Design Index; Japan International Transportation Institute: Washington, DC, 27 April, 2009.
- 38. Winebrake, J.J.; Corbett, J.J.; Green, E. H. Black Carbon Control Costs in Shipping; ClimateWorks: Pittsford, NY, 31 January 2009, 2009.
- 39. Winebrake, J.J., **Corbett, J.J.**, Hawker, J.S., Korfmacher, K.; Intermodal Freight Transport in the Great Lakes: Development and Application of the Great Lakes Geographic Intermodal Freight Transport Model, Great Lakes Maritime Research Institute, Superior, Wisconsin, 31 October 2008.
- 40. Buhaug, Ø.; Corbett, J.J.; Endresen, Ø.; Eyring, V.; Faber, J.; Hanayama, S.; Lee, D. S.; Lee, D.; Lindstad, H.; Mjelde, A.; Pålsson, C.; Wanquing, W.; Winebrake, J.J.; Yoshida, K. Updated Study on Greenhouse Gas Emissions from Ships: Phase I Report; International Maritime Organization (IMO) London, UK, 1 September, 2008.
- 41. **Corbett, J.J.**; Winebrake, J.J. Emissions from International Shipping in the Arctic: Draft AMSA Chapter Six Contribution; Prepared for Clean Air Task Force by Energy and Environmental Research Associates, LLC: Pittsford, NY, 1 September, 2008.
- 42. Green, E. H.; Winebrake, J.J.; **Corbett, J.J.** Opportunities for Reducing Greenhouse Gas Emissions from Ships; Prepared for Clean Air Task Force by Energy and Environmental Research Associates, LLC: Pittsford, NY, 30 July, 2008.
- 43. **Corbett, J.J.**; Winebrake, J.J.; Wang, H. Vessel-Based Emissions Impacts of Speed Reductions for International Shipping; Prepared for Oceana by Energy and Environmental Research Associates: Washington, D.C., 31 August, 2008
- 44. **Corbett, J.J.**, J.J. Winebrake, E.H. Green, V. Eyring, A. Lauer, Mitigating Health Impacts of Ship Pollution through Low Sulfur Fuel Options: Initial Comparison of Scenarios; Annex to MEPC 57, Item 4; Marine Environment Protection Committee, International Maritime Organization: London, UK, January 2008.
- 45. **Corbett, J.J.**, and J.J. Winebrake, Total Fuel Cycle Analysis for Alternative Marine Fuels: Sulfur and CO₂ Emissions Tradeoffs of California's Proposed Low-Sulfur Marine Fuel Rule, Final Report, Energy and Environmental Research Associates LLC, Pittsford, NY, May 2008.
- 46. Winebrake, J.J., **J.J. Corbett**, E.H. Green, An Inventory of Greenhouse Gas Emissions from Pleasure Craft and Commercial Fishing Vessels Operating in the State of California, Energy and Environmental Research Associates (EERA), Pittsford, NY, 2008.
- 47. **Corbett, J.J.**, Letter Discussing Technology Policy Research Relevant to Senate Bill 1499, to Senator Barbara Boxer, Chair Senate Committee on Environment and Public Works and copy to Senators Carper and Biden. Washington, D.C., March 2008.
- 48. Eyring, V., **J.J. Corbett**, D.S. Lee, J.J. Winebrake, Brief summary of the impact of ship emissions on atmospheric composition, climate, and human health; Health and Environment Sub-Group of the International Maritime Organization: London, UK, 6 November 2007.
- 49. Winebrake, J.J., and **J.J. Corbett**, Total Fuel Cycle Analysis for Container Ships: A Comparison of Residual Oil, Marine Gas Oil, and Marine Diesel Oil, submitted to Friends of the Earth International (FOEI) by Energy and Environmental Research Associates, Pittsford, NY, 2007.
- 50. **Corbett, J.J.**, C. Wang, and J. Firestone, Estimation, Validation, And Forecasts Of Regional Commercial Marine Vessel Inventories, Final Report, State of California Air Resources Board and the California Environmental Protection Agency and Commission for Environmental Cooperation of North America, Sacramento, CA, 2007.
- 51. **Corbett, J.J.**, and J.J. Winebrake, Scoping Paper on Emissions From Maritime Shipping Sector, edited by Energy and Environmental Research Associates, *Joint Transportation Research Center*, Organization for Economic Cooperation and Development and European Commission Ministries of Transport, Paris, 2007.
- 52. **Corbett, J.J.**, C. Wang, J.J. Winebrake, and E. Green, Allocation and Forecasting of Global Ship Emissions, submitted as a formal Annex submission to the International Maritime Organization, pp. 26, Clean Air Task Force and Friends of the Earth International, Boston, MA, 2007.

- 53. **Corbett, J.J.**, J.J. Winebrake, J. Hatcher, and A.E. Farrell, Emissions Analysis of Freight Transport Comparing Land-Side and Water-Side Short-Sea Routes: Development and Demonstration of a Freight Routing and Emissions Analysis Tool (FREAT), U.S. Department of Transportation, Research and Special Programs Administration, Washington, DC, 2007.
- 54. **Corbett, J.J.**, Environmental Impacts of Ocean Shipping in a Freight Context: A Summary of Current Assessments, Future Trends, and Approaches to Mitigation, report to Working Group on Transport, Organisation for Economic Cooperation and Development (OECD), Paris, 2006.
- 55. **Corbett, J.J.**, C. Wang, and J. Firestone, Estimation, Validation, and Forecasts Of Regional Commercial Marine Vessel Inventories, Tasks 3 And 4: Forecast Inventories for 2010 and 2020, State of California Air Resources Board, Sacramento, CA, 2006.
- 56. **Corbett, J.J.**, J.J. Winebrake, and E. Green, Cargo on the Move through California: Evaluating Container Fee Impacts on Port Choice, report for Natural Resources Defense Council and Coalition for Clean Air, pp. 41, Energy and Environmental Research Associates, Pittsford, NY, 2006.
- 57. **Corbett, J.J.**, C. Wang, and J. Firestone, Estimation, Validation, And Forecasts Of Regional Commercial Marine Vessel Inventories, Tasks 1 And 2: Baseline Inventory And Ports Comparison, Final Report, pp. 42, State of California Air Resources Board and Commission for Environmental Cooperation in North America, Sacramento, CA, and Montreal, Quebec, 2006.
- 58. W.C. Edwards, K. Bolechowsky, J. Wang, J.F. Pelletier, A. Richard, J. Young, and **J.J. Corbett**, Marine Emission Inventory Study, Eastern Canada And Great Lakes, Final Report, edited by Levelton Engineering Ltd and Maritime Innovation, pp. 74, Transport Canada, Montreal, Quebec, 2006.
- 59. **Corbett, J.J.**, Comments to U.S. EPA Oil Program regarding Proposed Amendments to the SPCC Rule, submitted by James J. Corbett, Jr., P.E., Ph.D., University of Delaware, Newark, DE, 2006.
- 60. Comments of J. Firestone, **J.J. Corbett**, College of Marine and Earth Studies, University of Delaware (with assistance of Joshua Thomas) on Docket Number USCG-2005-20380: Port Access Route Study of Potential Vessel Routing Measures to Reduce Vessel Strikes of North Atlantic Right Whales, 71 Fed. Reg. 29876 (May 24, 2006), U.S. Coast Guard, Washington, DC, 2006.
- 61. Comments of J. Firestone, **J.J. Corbett**, and Shannon Lyons, College of Marine and Earth Studies, University of Delaware on: (1) Docket Number 040506143-6016-02: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, 71 Fed. Reg. 36299 (June 26, 2006). (2) EIS No. 20060278, Draft DIS, NOA, 00, North Atlantic Ship Strike Reduction Strategy, 71 Fed. Reg. 38641, NOAA, Washington, DC, 2006.
- 62. **Corbett, J.J.**, J.J. Winebrake, and P. Woods, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries: Synthesis Report, pp. 15, Rutgers, State University of New Jersey and University of Delaware, New Brunswick, NJ, 2005.
- 63. **Corbett, J.J.**, Workshop Report: CX/NETS Inland Navigation Modeling Workshop, 28 September through 30 September, pp. 25, University of Delaware, Newark, DE, 2004.
- 64. **Corbett, J.J.**, and P.S. Fischbeck, Conceptual Model For Assigning Environmental Impact To Freight Logistics: A Supply Chain Emissions Model (SCEM), pp. 37, Newark, DE, 2004.
- 65. **Corbett, J.J.**, Verification of Ship Emission Estimates with Monitoring Measurements to Improve Inventory and Modeling, pp. 47, University of Delaware, Newark, DE, 2004.
- 66. **Corbett, J.J.**, and P. Woods, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries: Technical Memorandum One, Describing Evaluation Criteria, pp. 15, University of Delaware and Rutgers, State University of New York, Newark, DE, 2004.
- 67. **Corbett, J.J.**, J.J. Winebrake, and P. Woods, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries: Technical Memorandum Two, Identifying Economic Incentive Alternatives, pp. 35, University of Delaware and Rutgers, State University of New York, 2004.
- 68. **Corbett, J.J.**, J.J. Winebrake, and P. Woods, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries: Technical Memorandum Three, Evaluating Incentives to Implement Technical Options, pp. 49, University of Delaware and Rutgers, State University of New York, Newark, DE, 2004.
- 69. **Corbett, J.J.**, and D.S. Chapman, Decision Framework for Emission Control Technology Selection, pp. 37, United State Maritime Administration, Washington, DC, 2003.
- 70. **Corbett, J.J.**, Vessel Operator Engine Emissions Measurement Guide, Washington, DC, United States Maritime Administration, November 2002.
- 71. WestStart, J. Boesel, A. Farrell, D.H. Redman, **J.J. Corbett**, and J.J. Winebrake, Highway Ferry Integration Research: Analyzing Emissions and Emission Reduction Strategies for Passenger Ferries, WestStart, Alameda, CA, 2001
- 72. Corbett, J.J., Commercial Marine Vessel Inventory Review and Preparation for the Northwest U.S., pp. 18,

- Washington Department of Ecology, Olympia, WA, May 2001.
- 73. **Corbett, J.J.**, and A. Farrell, Comments to Public Meeting on the Management of High-Speed Commercial Vessel Traffic [USCG-2000-7205], U.S. Department of Transportation, Washington, D.C., 24 May 2000.
- 74. **Corbett, J.J.**, and A.L. Robinson, Diesel NOx Emissions Report for Premier Marine "Big Tom", Final Report to Premier Marine, Inc., 24 May 2000.
- 75. Skjølsvik, K.O., A.B. Andersen, **J.J. Corbett**, J.M. Skjelvik, Study of Greenhouse Gas Emissions from Ships, MARINTEK Sintef Group, Carnegie Mellon University, Center for Economic Analysis, and Det Norske Veritas, MT Report MT00-A23-038, Trondheim Norway, March 2000.
- 76. Kasibhatla, P., **J.J. Corbett**, S.N. Pandis, H. Levy, W.J. Moxim, M.C. Peterson, R.E. Honrath, and D.D. Parrish, Modeling Estimate of NOx and Ozone Impacts from International Shipping, Carnegie Mellon University, Pittsburgh, PA. 2000.
- 77. **Corbett, J.J.**, and P.S. Fischbeck, Comparison of Freight Transportation Modes, pp. 33, Carnegie Mellon University, Pittsburgh, PA, 2000.
- 78. **Corbett, J.J.**, and P.S. Fischbeck, Commercial Marine Emissions Inventory for EPA Category 2 and 3 Compression Ignition Marine Engines in United States Continental and Inland Waterways, U.S. EPA Task 1, Carnegie Mellon University, Pittsburgh, PA, 1998.
- 79. **Corbett, J.J.**, and P.S. Fischbeck, Letter to U.S. EPA Office of International Activities: CO₂ emissions from international shipping, Carnegie Mellon University, Pittsburgh, PA, 1998.
- 80. **Corbett, J.J.**, and P.S. Fischbeck, Memorandum: U.S. EPA Task 2A: Comments on Draft Detailed Design For the Marine Module for EPA NONROAD Emissions Model, Carnegie Mellon University, PA, 1998.
- 81. **Corbett, J.J.**, and P.S. Fischbeck, Memorandum: U.S. EPA Task 2B: Design suggestions based on comments in the Task 2A memorandum to improve the Draft Detailed Design for the Marine Module for EPA NONROAD Emissions Model, Carnegie Mellon University, Pittsburgh, PA, 1998.
- 82. **Corbett, J.J.**, and P.S. Fischbeck, Letter to U.S. EPA Region IX providing comments on the Acurex Environmental Draft Report "Analysis of Marine Emissions in the South Coast Air Basin" (Acurex 1997), Carnegie Mellon University, Pittsburgh, PA, 1998.
- 83. **Corbett, J.J.**, L. Pantaleno, et al. Oil and Hazardous Substance Spill Prevention Control and Countermeasures (SPCC) Plan for Naval Station Treasure Island, and Hunters Point Annex. Walnut Creek, CA, Radian Corporation, 1995.
- 84. McGuire, L. M., M. Strehlow, **J.J. Corbett**, R. L. Leonard. Review of Coatings and Solvent Use for Naval Air Station Alameda. Walnut Creek, CA, Radian Corporation, 1995.
- 85. Trapasso, J. A. J., **J.J. Corbett**, et al. Boiler NOx Retrofit Study for Bay Area Naval Installations, Final Report. Walnut Creek, CA, Radian Corporation, 1995.
- 86. McGuire, L. M., J. A. J. Trapasso, **J.J. Corbett**. PWC Boiler NOx Retrofit Study: Bid Specifications 100% Technical Submittal For Fleet Industrial Supply Center Oakland, Final Report. Walnut Creek, CA, Radian Corporation, 1994.
- 87. Dietrich, R. W., R. C. Henning, R. A. Beuttler, **J.J. Corbett**, J. A. J. Trapasso. New United Motor Manufacturing, Inc. Health Risk Assessment for the Proposed Facility Additions, Final Report. Sacramento, CA, Radian Corporation, 1993.
- 88. Kuffner, A. C., J. W. Lawrence, **J.J. Corbett**. Underground Storage Tank Management Plan At Naval Air Station Alameda, Final Report. Sacramento, CA, Radian Corporation, 1993.
- 89. Kuffner, A. C., J. W. Lawrence, **J.J. Corbett**. Underground Storage Tank Retrofit Study at Naval Air Station Alameda, Final Report. Sacramento, CA, Radian Corporation, 1993.
- 90. **Corbett, J.J.**, S. K. Benedict, et al. Solid Waste Management Plan For Naval Air Station Fallon [Nevada], Final Report. Sacramento, CA, Radian Corporation, 1993.
- 91. **Corbett, J.J.**, N. Davenport, et al. Initial and Follow-up Sampling Reports for Lead and Copper in Drinking Water, Naval Air Weapons Station, China Lake, Walnut Creek, CA, Radian Corp., 1993.
- 92. **Corbett, J.J.**, P. Tang, et al. Monitoring Plan for Lead and Copper in Drinking Water, Naval Air Weapons Station, China Lake. Walnut Creek, CA, Radian Corporation, 1993.
- 93. Priest, A. J., J. Aiello, **J.J. Corbett**, R. Rudolf. Underground Storage Tank Management Plan, Castle Air Force Base, California. Sacramento, CA, Radian Corporation, 1993.
- 94. Clark, J. A., **J.J. Corbett**, et al. Spill Prevention Control and Countermeasures (SPCC) Plan for Oil Products and Hazardous Materials For NAS Lemoore, Final Report. Sacramento, CA, Radian Corporation, 1992.

OTHER PUBLICATIONS

- 1. Corbett, J.J., Opinion Contributor, America Takes the Lead on Cleaner Ship Fuels, The Hill, 21 January 2019.
- 2. Winebrake, J.J., Corbett, J.J., The Urgency of Curbing Pollution from Ships, Explained, The Conversation, 12 April 2018.

- 3. RADIO: WVUD Campus Voices, Saving Lives with Cleaner Fuel, https://sites.udel.edu/campusvoices/2018/03/01/saving-lives-with-cleaner-fuel/, 1 March 2018.
- 4. RADIO: BBC Inside Science, Shipping air pollution, https://www.bbc.co.uk/programmes/b09r3nwz, 15 Feb 2018.
- 5. RADIO: BBC More or Less, Big Polluters: Ships v Cars, https://www.bbc.co.uk/programmes/w3cstyfd, 17 Oct 2017.
- 6. FILM: Documentary Freightened, Expert, https://www.freightened.com, 2016.
- 7. Winebrake, J.; **Corbett, J.J.**; Yuska, D., Methane emissions from natural gas use in the marine sector. EM: Air and Waste Management Association's Magazine for Environmental Managers 2016, 66, (December), 27-31.
- 8. Cohan, D. S.; Krakauer, N. Y.; **Corbett, J.J.**; Rife, D.; Halberstadt, A. R.; Parks, L. Y., Could cuts in sulfur from coal and ships help explain the 2015 spurt in Northern Hemisphere temperatures. In Earthzine: 2016.
- 9. Firestone, J., Corbett, J.J., and Samoteskul, K., Comment on United States Coast Guard (USCG) Atlantic Coast Port Access Route Study: Final Report, Docket No. USCG-2011-0351, ACPARS Workgroup (24 February 2016), 13 April 2016.
- 10. **Corbett, J.J.**, Supertankers, in *The Dictionary of Energy*, edited by C.J. Cleveland and C. Morris, Elsevier Science, Amsterdam, Netherlands, 2005.
- 11. **Corbett, J.J.**, and J.D. McCown, Cleaner Ship Fuel Could Go Far to Reducing Globe's Pollution, in *Pollution Online*, 2000.
- 12. Farrell, A., and **J.J. Corbett**, Meeting Environmental Challenges for Ferries, in *TR News*, No. 209, pp. 19-28, July-August 2000.
- 13. **Corbett, J.J.**, and A. Farrell, Environmental Challenges for Ferry Expansion, in *Marine News*, pp. 30-33, 26 June 2000.
- 14. Farrell, A., **J.J. Corbett**, "Needed: A Clear Vision of Ferries' Future," *Journal of Commerce*, Vol. 421, No. 29,534, 17 August 1999.
- 15. Corbett, J.J., P.S. Fischbeck, Spotlight on Ship Pollution, *Journal of Commerce*, Vol. 414, No. 29,108, 1 December 1997.

INVITED TALKS, WORKSHOPS AND CONFERENCE PRESENTATIONS

- 1. Presiding Officer, Current Research in Marine Environmental Issues, TRB 99th Annual Meeting, Washington DC, 13 January 2020.
- 2. Invited Speaker, Guide to Surviving and Thriving IMO 2020, Freight Day Part 4: Building Resilient Ships and Seaports: Toward Cleaner Maritime Transportation and Infrastructure, TRB 99th Annual Meeting, Washington DC, 14 January 2020.
- 3. Corbett, J.J., Keynote, Shipping & Environment II: From Regional to Global Perspectives, Gothenburg, Sweden, 4-6 September 2019.
- 4. Corbett, J.J., Benefits of Emission Control Areas, <u>International Conference on Ship Emission Control Areas</u> (ECAs), Beijing, China, 25-26 July 2019.
- 5. Corbett, J.J., Decarbonizing the freight network may define the Future Maritime Energy Outlook, Transportation Session, Beyond Electricity, AAAS Fellows Symposium, Washington, DC, 28 June 2019.
- 6. Corbett, J.J., IMO 2020 and Future Energy Outlook for Maritime, Transportation Research Board Mid-Year Meeting, Joint Meeting of the Marine Group Committees, Galveston, Texas, 12-14 June 2019.
- 7. Corbett, J.J., Conference Chair, The 40th International Bunker Conference, Oslo, Norway, 6-8 May 2019.
- 8. Lodge, D.M., Corbett, J.J., Changes in Ship-borne Introductions of Invasive Species in Coupled Natural-human Systems: Infrastructure, Global Trade, Climate and Policy, Meeting with Policymakers from Department of Interior, National Oceanic Atmospheric Administration, Environmental Protection Agency, Department of Transportation, Department of Navy, DHS USCG, U.S. House of Representatives, Washington, DC, 1 April 2019.
- 9. Corbett, J.J., IMO 2020 as a Value Proposition for Innovation?, TradeWinds IMO 2020 Disruption Forum, New York, NY, February 2019, https://www.tradewinds.events/ehome/us2020/agenda/.
- 10. Corbett, J.J., Lectern Session Moderator, Integrating Research for Shipping, Transportation, and Marine Environment, Transportation Research Board (TRB) 98th Annual Meeting, 12-17 January 2019.
- 11. Co-Instructor, Overview of MARPOL Annex VI Regulations for the prevention of air pollution from ships, Regional Workshop on Ratification and Effective Implementation of MARPOL Annex VI, Malta, 11 to 13 December 2018.
- 12. Corbett, J.J., Invited Seminar, Science Implications of the 21st Century Maritime Energy and Technology Transition, University of California, Irvine, 6 December 2018.
- 13. Corbett, J.J., and Winebrake, J.J., Methanol as a marine fuel, ARGUS Methanol Forum, Houston, TX, 11-13 Sep 2018.
- 14. Wang, Z, and Corbett J.J., Progress Presentation, NSF Coastal SEES Project Workshop, Fort Collins, CO, July 2018
- 15. Corbett J.J., Winebrake, J.J., Multi-attribute performance for intermodal maritime cargoes, Transforming the Marine

Transportation System through Multimodal Freight Analytics: Fifth Biennial Marine Transportation System Research and Technology Conference, Session 3C: Decision Support: Environmental, NAS 120, James Corbett, University of Delaware, presiding, 19-21 June 2018.

- 16. Conference Chair, 39th International Bunker Conference, Oslo, Norway, April 2018.
- 17. Corbett J.J., Emission Control Areas Drivers and Benefits, 5th Pacific Ports Clean Air Collaborative (PPCAC) Conference, Long Beach, CA, 20-22 March 2018.
- 18. Corbett, J.J., IMO 2020: Exploring the impact of the global sulphur cap on marine fuels, Session 3: Industry updates, CRU Suphur 2017 international conference, Atlanta, Georgia, 7 November 2017.
- 19. Corbett, J.J., Alumni remarks, California State University Maritime, San Francisco, 4 November 2017.
- 20. Corbett, J.J., Expert participation, Surface Ocean Lower Atmospheric Study (SOLAS), Gothenburg, Sweden, 26 October, 2017.
- 21. Corbett, J.J., Conference keynote, Shipping and Environment: Steps Forward in Joint Dialogue, Shipping and Environment: From Regional To Global Perspectives and 2nd Bonus Symposium, Gothenburg, Sweden, 24-25 October, 2017.
- 22. Corbett, J.J., Expert participation, ICCT's 4th workshop on marine black carbon emissions, Washington, DC, 3 October 2017.
- 23. Corbett, J.J., Freight: Global and Economic Perspective, Invited remarks to Special Committee per SR-10, Hockessin, 9 August 2017.
- 24. Wang, Z., Corbett, J.J., Presentation to NSF Coastal SEES NIS-RAPS project team, Chicago, July 2017.
- 25. Corbett, J.J., Winebrake J.J., Ocean Shipping and a Decarbonization Horizon, Carnegie Mellon University, 1 Mar 2017.
- 26. Corbett, J.J., Invited Talk, Torch Club, Newark, DE, 18 January 2016.
- 27. Corbett, J.J., Winebrake, J.J., TRB Workshop 193, "21st Century Sustainable Gateways", Transportation Research Board 96th Annual Meeting, Washington, DC, 8 January 2017.
- 28. Corbett, J.J., Invited Presentation, Global Freight Trends and Private Sector Responses, Delmarva Winter Freight Meeting, Duncan Center, Dover, DE 13 December 2016.
- 29. Corbett, J.J., Session 5: Emissions Inventories, Air Quality and Health Impacts, Chair's introductory presentation, U.S.-China Green Ports and Vessels Initiative Workshop and Study Tour, Long Beach, CA, 28 November through 2 December 2016.
- 30. Corbett, J.J., Technologies for Emissions/Discharge Control, in Session 4: Green Ports and Vessel Technologies, U.S.-China Green Ports and Vessels Initiative Workshop and Study Tour, Long Beach, CA, 28 November through 2 December 2016.
- 31. Corbett, J.J., Guest Lecture CIEG650 Urban Transportation Systems, Dupont Hall 350, University of Delaware, 7 November 2016.
- 32. Corbett, J.J., Winebrake, J.J., Jalkanen, J-P, Carr, E.W., Clean Shipping Delivers Value, Presented at side event to MEPC 70, London, UK, 24 October 2016.
- 33. Corbett, J.J., Winebrake, J.J., Jalkanen, J-P, Carr, E.W., The Health Impacts of Global Shipping, Presented at side event to MEPC 70, London, UK, 24 October 2016.
- 34. Corbett, J.J., "July Summary of Shipping Network Data Geosensing, Coastal SEES Group Meeting, New York, NY, 28 June 2016.
- 35. Corbett, J.J., "Geosensing Ship Activity to Estimate Invasive Species Risk," in Fourth Biennial Research and Development Conference, Theme: From Sail to Satellite: Delivering Solutions for Tomorrow's MTS, National Academy of Sciences, Washington, DC, 22 June 2016.
- 36. Corbett, J.J., Disque, A., Webinar, "TRB Straight to Recording for All: Applying Game Theory to Promote Strategic Decision Making in Marine Transportation Scenarios", VIMEO version link, 10 June 2016.
- 37. Corbett, J.J., Invited Talk, "Natural Gas: Environmental Trade-offs", at 37th International Bunker Conference, Copenhagen, Denmark, 28 April, 2016.
- 38. Corbett, J.J., Invited Talk, "COP21 and shipping: Dodged a bullet Stepping in front of a bullet train?", at 37th International Bunker Conference, Copenhagen, Denmark, 28 April, 2016.
- 39. Corbett, J.J., <u>Guest Interview</u> on WVUD's Campus Voices, "<u>The Arctic and Shipping</u>," University of Delaware, Aired 28 April 2016.
- 40. Corbett, J.J., Guided Talk during Arctic Month, Arctic Movie Night, "Battle for the Arctic" Documentary & Guided Talk with Professor Jim Corbett, Trabant Theater, University of Delaware, Newark, DE, 12 April 2016.
- 41. Corbett, J.J., Invited Speaker, Institute of Transportation Studies (ITS) UC Davis, Making Geosense of Transportation, Trade, Environment, and Energy, 26 February 2016.
- 42. Corbett, J.J., Invites Speaker, University of Notre Dame, "Big Overview of Strategies and Options for Stewardship Innovation in Marine Sector", 1 February 2016.

- 43. Carr, E.W.; Corbett, J.J., Assessment of Potential Emissions from LNG as a Marine Fuel in the Inland Rivers, 95th Annual Meeting of the Transportation Research Board, Session 776, January 2016.
- 44. Corbett, J.J., Invited Speaker, Exploring Potential Relationships Between Environmental Policy and Technological Innovation in International Shipping; Workshop on Supply and Demand in the Shipbuilding Industry, Working Party 6 (WP6) Shipbuilding Committee at the Organisation for Economic Cooperation and Development OECD Paris, France, November 2015.
- 45. Corbett, J.J., Invited Speaker: Fueling the marine shipping industry: A promising new market for LNG?, in LNG as a Marine Fuel, The Brookings Institution, Washington, DC, 3 March 2015.
- 46. Corbett, J.J., Comparative Evaluation of Commercial Marine Vessel Inventories, Meeting of the Task Force on Hemispheric Transport of Air Pollutants, International Institute for Applied Systems Analysis, Vienna, Austria, 4 February, 2015.
- 47. Corbett, J.J.; Invited Speaker: Vessel Operations, in Session 294, Liquefied Natural Gas as a Marine Fuel: Operations and Infrastructure, TRB 94th Annual Meeting, Washington, DC, 12 January 2015.
- 48. Corbett, J.J.; Winebrake, J.J.; Invited Speaker: Emissions Life Cycle of Liquid Natural Gas, in Session 635, Environmental Implications of Marine-Based Energy Production, TRB 94th Annual Meeting, Washington, DC, 13 January 2015.
- 49. Corbett, J.J.; Invited Speaker: Future of Marine Fuels: ECA & LNG; San Pedro, California, 3 December 2014.
- 50. Corbett, J.J.; Invited Speaker: Clean Cargo Working Group, Business for Social Responsibility, New York, NY, 10 November 2014.
- 51. Smith, T; Corbett, J.J.; Faber, J; Third IMO GHG Study 2014 Seminar, University College London (UCL), 16 October 2014.
- 52. Smith, T. W. P.; Jalkanen, J. P.; Anderson, B. A.; Corbett, J.J.; Faber, J.; Hanayama, S.; O'Keeffe, E.; Parker, S.; Johansson, L.; Aldous, L.; Raucci, C.; Traut, M.; Ettinger, S.; Nelissen, D.; Lee, D. S.; Ng, S.; Agrawal, A.; Winebrake, J.J.; Hoen, M.; Chesworth, S.; Pandey, A.; Third IMO GHG Study 2014 Presentation to IMO MEPC Diplomatic Session, International Maritime Organization, London, 14 October 2014.
- 53. Winebrake, J.J.; Corbett, J.J.; Global Trends in Maritime Transport, Canadian Marine Pilots 4th Congress 2014, Niagra Falls, Canada, 11 September, 2014.
- 54. Samoteskul, K. (Presenter); Firerstone, J; Corbett, J.J.; Callahan, J., Changing Vessel Routes Could Significantly Reduce the Cost of Future Offshore Wind Projects, Society for Benefit Cost Analysis (SBCA) 2014 Annual Meeting, Washington, DC, March 2014.
- 55. Winebrake, J.J. (Presenter), **Corbett, J.J.**, Thomson, H., Natural Gas vs. Conventional Fuel for Waterborne Freight Transport: A Life-Cycle Emissions Assessment with Case Studies, in Freight Day, Part 3, Road Map to Significant Reduction of Freight-Related Energy Consumption and Emissions (session 593), TRB Annual Meeting, Washington, DC, January 2014.
- 56. **Corbett, J.J.**, <u>Invited Presentation</u>, Delivering Blue and Green Change through Shipping Innovation, 2013 World Ocean Week, Xiamen University, 8 November 2013.
- 57. **Corbett, J.J.**, <u>Invited Speaker</u>, Advanced Supply Chain Visualization and Risk Analysis, Track: Supply Chain Exchange II, Council of Supply Chain Management Professionals (CSCMP) Annual Meeting, Denver, CO, October 2013.
- 58. **Corbett, J.J.**, <u>Invited Session Moderator</u>, Freight Innovation, Session VI: Delivering the Goods in an Urban World, 14th Biennial Conference on Transportation and Energy: Climate Policy in an Energy Boom, Asilomar, CA, August 2013
- 59. **Corbett, J.J.**, <u>Invited Speaker</u>, Freight Innovation "From the Sea," Delaware Valley Regional Planning Commission, Freight Advisory Committee, Philadelphia, PA, 17 June 2013.
- 60. **Corbett, J.J.**, <u>Invited Speaker</u>, Logistics-related environmental, economic, technical, and policy uncertainties about bringing new transportation fuels into the market, TRB Executive Committee, Policy Session: Energy, Transportation and Fuel Sources, Washington, DC, 20 June 2013.
- 61. **Corbett, J.J.**, <u>Conference Chair</u>, 34th International Bunker Conference: Compliance smooth sailing or costly confusion?, Gothenburg, Sweden, 24-26 April, 2013.
- 62. **Corbett, J.J.**, <u>Invited Presentation</u>, The ideal situation how it was meant to be, 34th International Bunker Conference, Gothenburg, Sweden, 25 April, 2013.
- 63. **Corbett, J.J.**, Invited Presentation, More than Navigation: Reflections on Tradition of the Sea and the Future of Freight, Torch Club Dinner Presentation, Newark, DE, March 2013.
- 64. **Corbett, J.J.**, <u>Invited Presentation</u>, Methods for locating, estimating, and updating 2009 global shipping emissions, Marine Environment Protection Committee Expert Workshop on the Update of GHG Emissions Estimate for International Shipping, London, 27 February 2 March 2013.
- 65. Corbett, J.J., Invited Presentation, Moving the world toward green freight, The International Council on Clean

- Transportation, Washington, DC, 18 December 2012.
- 66. **Corbett, J.J.**, <u>Invited Presentation</u>, 2012 U.S. Taiwan Sustainability Symposium: Creating Sustainable Cities and Promoting Sustainable Ports in the Asia Pacific Region, member of U.S. Delegation hosted by U.S. EPA, Kaohsiung, Taiwan, 10-12 December 2012.
- 67. **Corbett, J.J.**, <u>Invited Presentation</u>, Finding Interventions That Align Green Freight Goals With Supply Chains, Shell Foundation, London, 15 November 2012.
- 68. **Corbett, J.J.**, <u>Invited Presentation</u>, Low-carbon Sea Transportation Development, Forum of Marine Science and Technology, Xiamen University, 3 November 2012.
- 69. Corbett, J.J., Leveraging UTC Support: the GIFT Model, UD UTC Site Visit, 12 October 2012.
- 70. **Corbett, J.J.**, <u>Invited Webex Presentation</u>, Shipping: Overview of Available Scenarios, 2030 Scenarios Workshop, International Institute for Applied Systems Analysis (IIASA), Vienna, Austria, 8 October 2012.
- 71. **Corbett, J.J.**, <u>Invited Webex Presentation</u>, Detailed Methodology Summary for Ship Inventory and ECA Analyses, Mexico City, Mexico, at meeting with SEMARNAT, U.S. EPA, and Battelle, 7 September 2012.
- 72. **Corbett, J.J.**, Invited Speaker, Marine Working Group Meeting, ClimateWorks Non-CO2 Summit, Malta, 18-21 June 2012.
- 73. Kotchenruther, R., Corbett, J.J., Sources of Aerosol (PM2.5) Impacting Neah Bay WA, West Coast Collaborative Meeting: Air Quality in our Communities, 31 May 2012.
- 74. **Corbett, J.J.**, <u>Invited Presentation</u>, Opportunity to Extend North American ECA Benefits to Mexico, Mexico City, Mexico, at meeting with SEMARNAT, U.S. EPA, and Battelle, 30 May 2012.
- 75. **Corbett, J.J.**, <u>Invited Presentation</u>, Drivers for Sustainable Shipping, **European Union Maritime Day**, Gothenburg, Sweden, 22 May 2012.
- 76. **Corbett, J.**J., <u>Conference Chair</u>, 33rd International Bunker Conference: Increasing Complexity How to Adapt, Oslo, Norway, 18-20 April, 2012.
- 77. **Corbett, J.J.**, Invited Speaker, Arctic Shipping and Polar Code Development, Society of Naval Architects and Marine Engineers (SNAME), Philadelphia Chapter, 22 February 2012.
- 78. **Corbett, J.J.**, <u>Invited Speaker</u>, Arctic Shipping and Polar Code Development, Design and Equipment Subcommittee, International Maritime Organization, London, 14 February 2012.
- 79. **Corbett, J.J.**, <u>Invited Speaker:</u> Arctic shipping impacts from a whole-ship context, at 4th Annual Arctic Shipping North America Conference, St. Johns, Newfoundland, Canada, 12 October 2011.
- 80. **Corbett, J.J.**, <u>Invited Speaker:</u> Maximum Feasible Emission Reduction Potential, at Workshop on Potential Marine Campaigns To Reduce Air Pollution & Climate Forcers, Brussels, Belgium, 5 October 2011.
- 81. **Corbett, J.J.**, <u>Invited Speaker:</u> Slow steaming economics & black carbon in the Arctic, at Ship Speed Limits Workshop, Brussels, Belgium, 4 October 2011.
- 82. **Corbett, J.J.**, <u>Invited Speaker:</u> Goods Movement in the Northeast: Projections, Trends, and Impacts, at Healthy People, Global Goods, Philadelphia, Pennsylvania, 23 September 2011.
- 83. Winebrake, J.J., Hawker, J.S., Corbett, J.J., Sustainable intermodal freight transportation: Overview of MARAD Supported Work, presentation to the U.S. Department of Transportation, Maritime Administrator and staff, Washington, DC, 7 September, 2011.
- 84. **Corbett, J.J.**, <u>Invited Presentation:</u> Understanding the true eco-efficiency benefits of Fluoropolymer Foul Release technology, Side Event Presentation at MEPC 62, International Maritime Organization, London, 12 July 2011.
- 85. **Corbett, J.J.**, Winebrake, J.J., Ghosh, A., Hawker, J.S., Korfmacher, K., Lee, E.E., Silberman, J., Evaluating the Environmental Attributes of Freight: Geospatial Intermodal Freight Transportation (GIFT) Modeling, at 6th International Conference on Industrial Ecology Science, Systems, and Sustainability, Berkeley, CA, 9 June 2011.
- 86. **Corbett, J.J.**, Facilitator: Shipping and Freight Track, at Breaking Barriers to Deployment, Creating Climate Wealth Summit, Washington, DC, 2-4 May 2011.
- 87. **Corbett, J.J.**, <u>Invited Speaker:</u> Times of Dynamic Change: Demand, Supply, and Technology for International Bunkers in 2021 and Beyond, at 32nd International Bunker Conference, Copenhagen, Denmark, 7 April 2011.
- 88. **Corbett, J.J.**, Invited Speaker: Fluoropolymer Foul Release Performance Analysis, at The Institute of Marine Engineering, Science & Technology (IMarEST), London, UK, 17 February 2011.
- 89. **Corbett, J.J.**, Invited Speaker: Developing Shipping Emissions Assessments, Inventories and Scenarios, ID# A41I-06, A36: Quantification of Emissions: Addressing Current and Future Challenges, *American Geophysical Union 2010 Fall Meeting*, San Francisco, CA, 16 December 2010.
- 90. **Corbett, J.J.**, Invited Public Lecture: Delaware's Connection to America's Spill, Torch Club of Delaware, Newark, DE, 8 December 2010.
- 91. **Corbett, J.J.**, <u>Invited Speaker</u>: Approaching from Over-the-Horizon: Science and Policy Connections of Shipping Technology Trends, *NOAA Earth Systems Research Laboratory*, Boulder, CO, 10 November 2010.
- 92. Corbett, J.J., Invited Speaker: The Challenge of the Here and Now: Navigating opportunity, Sustainable Shipping

- Conference 2010, Miami, FL, 20-22 October 2010.
- 93. **Corbett, J.J.**, <u>Invited Speaker</u>: Diesel Black Carbon PM: Changing climate for/and PM control, in session Future Trends: Climate Change and Black Carbon Activities, *Clean Diesel 10 Conference*, Walter E. Washington Convention Center, Washington, DC, 19-20 October 2010.
- 94. **Corbett, J.J.**, <u>Invited Presentation</u>: Moving Freight to the High Road: Co-benefits of Energy, Economics, and Environment, Chalmers University, Gothenburg, Sweden, 6 September 2010.
- 95. **Corbett, J.J.**, <u>Invited Presentation</u>: Low-Carbon Shipping: A step toward three dimensions of sustainability, at *Low-Carbon Shipping: A systems approach, Project Meeting*, Naval Architecture and marine engineering, University of Strathclyde, Glasgow, Scotland 24 June 2010.
- 96. **Corbett, J.J.**, Winebrake, J.J., <u>Invited presentation</u>: Climate Change: Implications for Shipping, *World Ocean Council Sustainable Ocean Summit*, Belfast, Ireland, 14-18 June 2010.
- 97. Winebrake, J.J., **Corbett, J.J.**, Economic Impacts of C3 Rule on Great Lakes Shipping: Modeling fuel price impacts on potential modal diversion, *EPA Stakeholders Meeting*, Ann Arbor, MI, 10 June 2010.
- 98. **Corbett, J.J.**, <u>Invited Speaker</u>: Transportation, Distribution, and Infrastructure Roles in Bioenergy Pathways, *Northeast Sun Grant 2010 Regional Conference*, 24-26 May 2010.
- 99. **Corbett, J.J.**, <u>Invited Speaker</u>: Improving the Energy Efficiency and Environmental Performance of Goods Movement: A Multi-Modal Perspective, Freight Efficiency panel at the Alliance to Save Energy's *Workshop on Transportation Energy Efficiency Improvement Potential*, 10 May 2010.
- 100. **Corbett, J.J.**, Invited Speaker: Session 1— Mission (IM)Possible? Options and Scenarios, *International Bunker Conference 2010 (IBC 2010)*, Stockholm, Sweden, 28-30 April 2010.
- 101. **Corbett, J.J.**, <u>Invited Speaker</u>: in Roundtable 3—Shipping Green: How Shippers Can Benefit from a Sustainable Intermodal Supply Chain, *7th Annual North American Marine Highways & Logistics Conference, Linthicum Heights*, MD, April 6-7, 2010
- 102. **Corbett, J.J.**, Invited Speaker: Impacts of Shipping Emissions, at *Second HTAP 2010 Report Content Workshop*, Chapel Hill, NC: 1-2 March, 2010.
- 103. **Corbett, J.J.**, Winebrake, J.J., Invited presentation: International Arctic Transportation Assessment, In session by *International Aspects of Transportation Energy Subcommittee ADC70(1)*, 89th Transportation Research Board Annual Meeting, January 2010.
- 104. **Corbett, J.J.**, <u>Invited Speaker</u>: *World Shipping Council Dinner*, New York, NY, 14-15 October, 2009.
- 105. **Corbett, J.J.**, <u>Invited Speaker</u>: Intermodal Freight Modeling including Carbon Footprint, *Ship Operators Cooperative Program*, Baltimore, MD, 10-11 November, 2009.
- 106. **Corbett, J.J.**, Invited Speaker and Panel Moderator: World Maritime Day, New York, NY, 14-15 October, 2009.
- 107. Corbett, J.J., Coordinator: GIFT Workshop, Rochester, NY, 17 August, 2009.
- 108. **Corbett, J.J.**, Invited Participant: Asilomar Conference on Transportation and Energy Policy, Monterey, CA, 28-31 July 2009.
- 109. **Corbett, J.J.**, Presentation to Diplomatic Session: *Second IMO GHG Study* 2009, London, UK, 13-14 July 2009.
- 110. Corbett, J.J., Invited Speaker: ClimateWorks Black Carbon Summit, Copenhagen, Denmark, 15-16 June 2009.
- 111. **Corbett, J.J.**, Conference co-coordinator and <u>Invited Speaker</u>: *Data and Tools for Understanding Goods Movement-Air Quality*, Irvine, CA, 1-4 June 2009.
- 112. **Corbett, J.J.,** <u>Invited Speaker:</u> Emissions from International Shipping in the Arctic, Task Force on Hemispheric Transport of Air Pollution (HTAP), sponsored by the U.S. EPA and the European Commission, St. Petersburg, Russia, 30 March 3 April, 2009.
- 113. **Corbett, J.J.**, <u>GHG Study Group Member</u>, Japan International Transportation Institute, hosted by American President Lines, Oakland, CA, 28-30 January 2009.
- 114. Winebrake, J.J., **Corbett, J.J.**, Visualizing a Future Supply Chain with Lower-Carbon Goods Movement (P09-0034) at the 88th Annual Meeting of the Transportation Research Board, Washington, DC, 11-15 January 2009.
- 115. Corbett, J.J., Invited Speaker: ICCT Black Carbon Workshop, Nobel House, London, UK, 5-6 January 2009.
- 116. **Corbett, J.J.**, Invited Speaker: Session: Navigating the oceans: Transport security, transport technology, and maritime infrastructures at the *OECD/ITF Global Forum on Sustainable Development: Transport And Environment In a Globalising World*, Guadalajara, Mexico, 10-12 November 2008.
- 117. **Corbett, J.J.**, Invited Speaker: Shipping's Crucial Role in Reducing Risks of Global Warming, Session One: Climate Change: Shipping's Next Challenge, *Sustainable Shipping: Political Will, Practical Solutions*, Washington, DC 2008.
- 118. **Corbett, J.J.**, Invited Speaker: Part IV: Impacts of globalisation on transport activity levels at the *XVII Malente Symposium*, *Theme: More than Water Oceans and Global Responsibility*, Dräger Foundation, ZEIT Foundation

- Ebelin and Gerd Bucerius, and the Cluster of Excellence 'The Future Ocean', Kiel Marine Sciences, Lübeck, October 12-14, 2008.
- 119. **Corbett, J.J.**, <u>Invited Public Address</u>: Achieving a Sustainable Course for Goods Movement on the Delaware, *Port of Wilmington Maritime Society*, University and Whist Club in Wilmington, 3 October, 2008.
- 120. **Corbett, J.J.**, *UD UTC Seminar*: Regional Freight Data for Delaware, Newark, DE, September 2008.
- 121. **Corbett, J.J.**, <u>Invited Seminar</u>: Modeling Multimodal Dimensions of Sustainability in Freight Transportation, *Environment Canada*, Hull, Quebec, August 2008.
- 122. **Corbett, J.J.**, <u>Invited Seminar</u>: Greenhouse Gas Emissions from International Maritime Transportation, *Environment Canada, Hull*, Quebec, August 2008.
- 123. **Corbett, J.J.**, J.J. Winebrake, <u>Keynote Address</u>: The Future of Freight: Improving Environmental, Economic, and Energy Dimensions of Goods Movement, *Faster Freight-Cleaner Air (FFCA) East Coast*, NY, NY, June 2008.
- 124. **Corbett, J.J.**, <u>Invited Presentation:</u> Impacts of Shipping Emissions, <u>UNECE/CLRTAP Task Force on Hemispheric Transport of Air Pollution</u>, National Academy of Sciences, Washington, DC, June 2008.
- 125. Wang H., J. Firestone, **J.J. Corbett**, China Offshore Wind Resource Assessment Using Ship-Based Measurements, *University of Maryland at COAA Spring Workshop*, May, 2008.
- 126. **Corbett, J.J.**, Invited Seminar: Measuring and Mitigating Goods Movement Health Impacts, *University of Southern California (USC) Keck School of Medicine*, Southern California Environmental Health Sciences Center, May 2008.
- 127. **Corbett, J.J.**, Invited Seminar: Visualizing Science and Environmental Policy: GIS and Sustainable Freight Transport, *Department of Geography*, University of Delaware, May 2008.
- 128. **Corbett, J.J.**, Delaware Center For Transportation Spring 2008 Research Showcase, *Delaware Department of Transportation*, Dover, Delaware, May 2008.
- 129. **Corbett, J.J.**, Moving Goods Well, *Land Use and Environmental Planning Course Lecture*, University of Delaware, D.C., April 2008.
- 130. **Corbett, J.J.**, J.J. Winebrake, Advancing Commercial Marine Vessel Inventories and Forecasts, presentation to *Project Team for International Maritime Organization Updated Study of Greenhouse Gas Emissions from Ships* (*Phase I*), March 2008.
- 131. **Corbett, J.J.**, J.J. Winebrake, The Benefits, Costs, and Environmental Tradeoffs of Emissions Reductions from Global Shipping, *Deutsches Zentrum fuer Luft- und Raumfahrt (DLR) Institut für Physik der Atmosphäre (IPA)*, Germany, 04 March, 2008.
- 132. **Corbett, J.J.**, Visualizing Science and Environmental Policy, <u>Invited Seminar</u>, *California State University*, *Monterey Bay*, February 2008.
- 133. **Corbett, J.J.**, Science, Environment, and Politics, Invited Lecture, *California State University, Monterey Bay*, February 2008.
- 134. **Corbett, J.J.**, Understanding CO₂ from Ships, Future IMO Regulation On Greenhouse Gas Emissions From International Shipping, International Workshop On Expectations And Possibilities, Danish Maritime Authority, Copenhagen, February 2008.
- 135. **Corbett, J.J.**, Moving Freight to a Higher Road, in Session: Moving Forward On Reducing Transportation GHG Emissions, *National Council for Science and Environment*, Washington, D.C., January 2008.
- 136. **Corbett J.J.**, J.A. Callahan, C.L. Callahan, J. Firestone, Comparative Quantitative Estimates of Decreased Encounter Probabilities in the Right Whale Habitat through Shifting of Vessel Traffic, *North Atlantic Right Whale Consortium Meeting*, New Bedford, MA, November 2007.
- 137. **Corbett J.J.**, Understanding CO₂ from Ships, *Bunkerworld Marine Fuel Sustainability Forum: the Tide of Change*, Long Beach, CA, October 2007.
- 138. **Corbett, J.J.**, Regional Commercial Marine Vessel Inventories and Forecasts, in *Air Resources Board Chair's Seminar*, California Environmental Protection Agency, Sacramento, CA, August, 2007.
- 139. **Corbett, J.J.**, and J.J. Winebrake, Greenhouse Gas Impacts from Fuel Switching, in *California Maritime Technical Working Group*, California Environmental Protection Agency, Sacramento, CA, August, 2007.
- 140. **Corbett, J.J.**, Emissions from Ships in Session: The Contribution of Transportation Sources to Ambient OC Concentrations, *MANE-VU and Midwest RPO Science Meeting*, Timonium, MD, July, 2007.
- 141. **Corbett, J.J.**, Environmental Impacts of Maritime Shipping in a Freight Context, Invited presentation to the *Joint Transportation Research Center*, Organization for Economic Cooperation and Development and European Commission Ministries of Transport, OECD Headquarters Paris, France, 21-22 May 2007.
- 142. **Corbett, J.J.**, Engineering Sustainable Freight Transport, *University of California, Merced*, February, 2007.
- 143. **Corbett, J.J.**, Policy Analyses for Sustainable Shipping: Concepts, Application, Discussion, in *Policy Analysis Seminar Series at Office of Policy NOAA Fisheries Service*, Washington, DC, January, 2007.
- 144. **Corbett, J.J.**, Environmental Impacts of Ocean Shipping in a Freight Context, Invited presentation to the

- Organisation For Economic Co-Operation And Development (OECD) Working Group On Transport, Environmental Policy Committee, OECD Headquarters Paris, France, 30 November 2006.
- 145. Firestone, J., **J.J. Corbett**, C. Wang, and S. Lyons, Modeling in Areas with Sparse Data: Statistical Modeling of Spring Mid-Atlantic Migration, in *The Annual Meeting of the North Atlantic Right Whale Consortium*, North Atlantic Right Whale Consortium, New Bedford, Massachusetts, November, 2006.
- 146. Lyons, S.B., A.S.M. Vanderlaan, C. Wang, **J.J. Corbett**, J. Firestone, and C.T. Taggart, Using vessel-whale strike and encounter probabilities to advance vessel traffic management, in *The Annual Meeting of the North Atlantic Right Whale Consortium at the.*, North Atlantic Right Whale Consortium, New Bedford, Massachusetts, Nov., 2006.
- 147. Wang, C., S. Lyons, **J.J. Corbett**, and J. Firestone, Using ship speed and mass to describe potential collision severity with whales, in *The Annual Meeting of the North Atlantic Right Whale Consortium*, New Bedford, Massachusetts, November, 2006.
- 148. **Corbett, J.J.**, Forecasting Freight Emissions, Invited Speaker at *Emissions Inventory and Future Projections Workshop*, Task Force on Hemispheric Transport of Air Pollutants (HTAP), under the UNECE Convention on Longrange Transboundary Air Pollution (LRTAP), http://www.htap.org/, Beijing, China, 19 October 2006.
- 149. **Corbett, J.J.**, LNG Tankers and Air Emissions, Invited presentation to *LNG Interagency Working Group Meeting*, State Lands Commission, Marine Facilities Division, Hercules, CA, 5 October 2006.
- 150. **Corbett, J.J.**, Moving Freight Transport Onto the High Road, Invited presentations at *UC Davis Hydrogen Pathways Seminar*, 14 November 2006; at *Cooperative Institute for Research in the Atmosphere (CIRA)*, Colorado State University, 11 September 2006; at *UMTRI Research Colloquium*, University of Michigan, 30 August 2006; at *Green Design Institute*, Carnegie Mellon University, 28 August 2006.
- 151. **Corbett, J.J.**, Environmental Performance and Short Sea Shipping (presentation), Invited talk at the *North American Marine Conference, Towards A Shortsea Shipping Strategy For The North American Continent*, Chamber of Shipping, Vancouver, British Columbia, April, 2006.
- 152. Kunkel, R., The Role of Short Sea Shipping for Disaster Response and Recovery, presentation prepared by **J.J. Corbett**, and J.J. Winebrake, in *North American Marine Conference, Towards A Shortsea Shipping Strategy For The North American Continent*, Chamber of Shipping, Vancouver, British Columbia, April, 2006.
- 153. **Corbett, J.J.**, J. Firestone, C.T. Taggart, C.F. Wang, A.S.M. Vanderlaan, and S.B. Lyons, Application of Ship Speed and Mass Characteristics to Describe Potential Severity of Risk-Based Ship Collisions with Whales, in *20th Conference of the European Cetacean Society*, Gdynia, Poland, April, 2006.
- 154. Firestone, J., **J.J. Corbett**, C.T. Taggart, C.F. Wang, S.B. Lyons, and A.S.M. Vanderlaan, Ship Collisions with North Atlantic Right Whales: Modeling Encounter Probabilities for Conservation Management, in *20th Conference of the European Cetacean Society*, Gdynia, Poland, April, 2006.
- 155. **Corbett, J.J.**, Moving Freight Transport Onto the High Road, Invited presentation at *Sonoma Technology Incorporated*, February, 2006.
- 156. Meyer, P.E., J. Winebrake, and **J.J. Corbett**, What the Hull is Really Happening? Total Fuel Cycle Energy and Emissions from Marine Vessels, in 21st Annual Meeting and Conference of the International Association for Science, Technology, & Society, International Association for Science, Technology, & Society, Baltimore, MD, February, 2006.
- 157. **Corbett, J.J.**, Technology Policy to Reduce Air Pollution from Ports and Vessels: Current Efforts and Initiatives, Invited presentation at *Workshop 136, Multimodal Approach to Address Freight Air Quality Issues, TRB* 85th Annual Meeting, Washington, D.C., January, 2006.
- 158. Lyons, S.B., A.S.M. Vanderlaan, C. Wang, **J.J. Corbett**, J. Firestone, and C.T. Taggart, Spatial and Temporal Modeling of North Atlantic Right Whale Ship Encounter Probabilities to Advance Vessel Traffic Management (Presentation by S.B. Lyons), *16th Biennial Conference on the Biology of Marine Mammals*, San Diego, 2005.
- 159. Wang, C.F., S.B. Lyons, **J.J. Corbett**, and J. Firestone, Characterizing commercial ship traffic through a GIS model and its potential implications for mitigating ship strikes of large whales (Poster Presentation), in *Preconference workshop on the Application of GIS and Spatial-Temporal Modeling for Marine Mammal Science and Management, 16th Biennial Conference on the Biology of Marine Mammals*, San Diego, CA, 2005.
- 160. Wang, C., S. Lyons, A.S.M. Vanderlaan, J. Firestone, **J.J. Corbett**, and C.T. Taggart, Modeling ship traffic & predicting interactions between ships & whales, in *North Atlantic Right Whale Consortium*, 2005 Annual Meeting, New Bedford, MA, 2005.
- 161. **Corbett, J.J.**, Environmental and Regulatory Issues: Changing the Dynamics of the Market? Policy signals and long-term marine fuel trends, Invited Presentation at *Platts 2nd Annual Bunker and Residual Fuel Oil Conference An Assessment of the Global Market for the "Bottom of the Barrel"*, New Orleans, LA, July, 2005.
- 162. **Corbett, J.J.**, and C. Wang, Discussion of various growth rates to estimate future emissions (and goods movement), Teleconference presentation to the *California Air Resources Board*, June, 2005.
- 163. **Corbett, J.J.**, Modeling Marine Traffic and Environmental Impacts, Invited seminar in *Oceanography at*

- Dalhousie University, Halifax, Nova Scotia, Canada, June, 2005.
- 164. Winebrake, J.J., P.E. Meyer, and **J.J. Corbett**, A Total Fuel Cycle Analysis of Alternative and Conventional Fuels in Marine Transportation, Teleconference presentation to project advisory panel for *DOT Climate Change contract*, June, 2005.
- 165. **Corbett, J.J.**, and C. Wang, The Global Scene of Ship Emissions, in *Air Pollution from Ships, Swedish Maritime Administration Symposium*, Invited Presentation, Stockholm, Sweden, May, 2005.
- 166. **Corbett, J.J.**, and C. Wang, Emissions in Transit: CMV Inventory Development, Validation, and Application to Emerging Policy Analysis, Invited presentation at the *West Coast SECA Working Meeting*, Aptos, CA, April, 2005.
- 167. **Corbett, J.J.**, Regional Ship Activity and Location, *The Haagen-Smit Symposium: Ships, Trains, and the Future of Goods Transport*, Invited presentation and chair of session: Overview of International Goods Transport, Aptos, CA, April, 2005.
- 168. **Corbett, J.J.**, and C. Wang, Development of Port-specific Emission Inventories, poster presentation at *The Haagen-Smit Symposium: Ships, Trains, and the Future of Goods Transport*, Aptos, CA, April, 2005. **Corbett, J.J.**, and C. Wang, Regional Scale Inventories of Commercial Marine Emissions, poster presentation at *The Haagen-Smit Symposium: Ships, Trains, and the Future of Goods Transport*, Aptos, CA, April, 2005.
- 169. **Corbett, J.J.**, and C. Wang, CMV Inventory Development, Validation, and Application to Emerging Policy Analysis, Invited presentation, *Chairman's Air Pollution Seminar Series, California Air Resources Board*, Sacramento, CA, April, 2005.
- 170. **Corbett, J.J.**, Environmental Management of Delaware's River of Commerce: Charting a Course for Marine Transportation, seminar in *Department of Civil, Architectural, and Environmental Engineering at Drexel University*, Invited Presentation, Philadelphia, PA, February, 2005.
- 171. Winebrake, J.J. and **J.J. Corbett**, Flexible Technology and Policy Approaches to Reducing Emissions in the Marine Transportation Sector, in 20th Annual International Association for Science, Technology, & Society (IASTS) Conference: STS for All: Interdisciplinary Challenges for Stewardship of Planet Earth, Baltimore, MD, February 2005.
- 172. **Corbett, J.J.**, and C. Wang, Modeling Marine Traffic and Environmental Impacts, in *7th MTS Research and Technology Coordination Conference*, Interagency Committee for the Marine Transportation System (ICMTS), Washington, DC, November 2004.
- 173. Firestone, J., and **J.J. Corbett**, Evaluating Risk of Species Introduction to Facilitate Implementation of the New Global Ballast Water Convention and Conserve Marine Biodiversity, in 8th International Wildlife Law Conference, New Orleans, LA, November 2004.
- 174. **Corbett, J.J.**, Marine Transportation Issues Related to Climate Change, in *IPIECA Workshop on Transportation and Climate Change*, Invited Presentation, International Petroleum Industry Environmental Conservation Association, Baltimore, MD, October 2004.
- 175. Firestone, J., and **J.J. Corbett**, Transporting to the Port Environment: International Legal and Policy Responses to Reduce Ballast Water Species Introductions, in *Second IUCN Academy of Environmental Law Colloquium*, University of Nairobi, Nairobi, Kenya, October 2004.
- 176. Firestone, J., N.D. Cass, **J.J. Corbett**, and J.J. Winebrake, Risk-based Decision-making and Optimization in Ballast Water Policy Development, in *13th International Conference on Aquatic Invasive Species*, Ennis, Ireland, September 2004.
- 177. **Corbett, J.J.**, Delaware's River of Commerce, *CMS Hotel du Pont Lunch & Lecture Series*, Wilmington, DE, March 2004.
- 178. **Corbett, J.J.**, Toward Environmental Stewardship: Charting a Course for Marine Transportation, in Session VI, Clearing the Air: Passenger Vessel Emissions, *Passenger Vessel Association Annual Meeting and Ferry Conference at MariTrends 2004*, New Orleans, LA, February 2004.
- 179. **Corbett, J.J.**, Toward Environmental Stewardship: Charting a Course for Marine Transportation, in "Green Ports Green Ships" Panel, Sponsored by the Marine Environmental Task Force, 83rd Annual Meeting of the Transportation Research Board, January 2004.
- 180. **Corbett, J.J.**, Air Emissions From Ships: Environment and Policy Research Scope, Status, and Outlook, *TRB Marine Board*, Invited Presentation, New York, NY, October 2003.
- 181. **Corbett, J.J.**, Addressing Air Pollution from Ships, in session titled Environmental Issues in Marine Transportation Policy, *Symposium on National and International Policy Issues in Marine Transportation*, University of Delaware, Newark, DE, October 2003.
- 182. Cass, N.D., **J.J. Corbett** and J. Firestone, "Risk Assessment for Ballast Water Introduced Species Policy Issues," *US EPA, NOAA, USCG* in advance of IMO Ballast Water Convention Negotiations, Washington, D.C., June 2003.
- 183. Cass, N., J.J. Corbett, J. Firestone, Technology Policy Implications for Ballast Water Introductions of Non-

- indigenous Species, 12th International Conference on Aquatic Invasive Species, Windsor, Ontario, Canada, 9-12 June 2003.
- 184. Cass, N.D., **J.J. Corbett** and J. Firestone, "Technology Policy Implications for Ballast Water Introductions of Non-indigenous Species," *Michigan Department of Environmental Quality*, Lansing, Michigan, June 2003.
- 185. **Corbett, J.J.**, N.D. Cass, J. Firestone, Conceptual Model of Ballast Water Risk, *Third International Conference on Marine Bio-Invasions*, San Diego, CA, 16-19 March 2003.
- 186. **Corbett, J.J.**, J. Boesel, Passenger Ferries, Air Quality, and Greenhouse Gases: Can System Expansion Result in Fewer Emissions in the San Francisco Bay Area?, *Transportation Research Board 82nd Annual Meeting*, Washington, DC, Transportation Research Board, January 2003.
- 187. **Corbett, J.J.**, and Fischbeck, P.S., One-Day Workshop, *Sea Carrier Outreach Meeting*, hosted by the University of Delaware Graduate College of Marine Studies and Business for Social Responsibility Clean Cargo Working Group, Goodstay Center, 2600 Pennsylvania Avenue, 2 October 2002.
- 188. **Corbett, J.J.**, Highway Ferry Integration Research: Analyzing Emissions & Emission Reduction Strategies for Passenger Ferries, *National Association of Environmental Professionals*, Dearborn, MI, June 2002.
- 189. **Corbett, J.J.** Heavy-Duty Engine Technology (Vehicle, Marine and Rail), *Northeast Advanced Vehicle Consortium*, Invited Presentation, Cambridge, MA, May 2002.
- 190. **Corbett, J.J.**, Establishing the Baseline for Measurements and Technology Evaluation, invited presentation, *U.S. Maritime Administration Workshop on Maritime Energy and Clean Emissions*, 30 January 2002.
- 191. Farrell, A., D. Keith, and **J.J. Corbett**, Adaptive Management of Technological Change: Strategy for Introducing Hydrogen into Transportation, in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
- 192. **Corbett, J.J.**, Research Needs: Calculating the Public Air Quality Benefits of Private Container on Barge Movements, Session: Container on Barge: Problems, Practical and Political, *MTS Research & Technology Coordination Conference*, Washington, DC, 16 November, 2001.
- 193. **Corbett, J.J.**. Ship Emissions Study, *NOAA ITCT 2k2 Planning Meeting*, Boulder, CO, 28 Nov., 2001.
- 194. **Corbett, J.J.**, Current Research Questions Related to Ship Emissions, Science, and Policy, *POSE Seminar*, College of Marine Studies, University of Delaware, 7 November 2001.
- 195. **Corbett, J.J.**, and P.S. Fischbeck, Environmental Impacts of Sea Transportation: Current Understanding, Implications, and Opportunities, *Workshop presentations to International Maritime Carriers for IKEA*, Singapore (August), Amsterdam (October), 2001.
- 196. **Corbett, J.J.**, SEACalc® Model Discussion, *BSR Clean Cargo Meeting*, September 2001.
- 197. **Corbett, J.J.**, Ship Emissions Assessment (SEA) Project Status Update, *11th GEIA Meeting*, Paris, France, 18-22 June 2001.
- 198. **Corbett, J.J.**, Marine Transportation in the 21st Century: Navigating the Way Ahead, public lecture in *Ocean Currents Lecture Series*, Graduate College of Marine Studies, Lewes, DE, May 2001.
- 199. **Corbett, J.J.**, and P.S. Fischbeck, Sources and Transport of Air Pollution from Ships: Current Understanding, Implications, and Trends, in *Conference on Marine Vessels and Air Quality*, U.S. EPA, CARB, PMSA, San Francisco, CA, February 2001.
- 200. **Corbett, J.J.** Marine Transportation and Global Climate Change. Global Climate Change Seminar, *Eno Transportation Foundation*, Invited Seminar, 23 January 2001.
- 201. **Corbett, J.J.**, and A. Farrell, Trends in International, Federal, and Local Marine Emission Regulations (Invited Presentation), in *MARAD Workshop on Alternative Fuels for Ferries and Other Vessels*, Maritime Administration (MARAD), Alameda, CA, 2000.
- 202. **Corbett, J.J.**, Reducing Greenhouse Gases in Maritime Transportation System, *Seminario Sobre Eficiencia Energetica Y Energias Renovables*, invited presentation, Univsidad Politechnica de Puerto Rico, San Juan, Puerto Rico, 19 October 2000.
- 203. **Corbett, J.J.**, Diesel Fuel Emissions: Influence of Antifouling Performance: Identifying the Issues, *Washington Paint Technical Group*, invited presentation, Washington, D.C., 12 April 2000.
- 204. Corbett, J.J., and P.S. Fischbeck, Air Emissions and Alternative Propulsion Technologies for Ships, Ferries, Towboats, *Marine Board, Transportation Research Board*, invited presentation, National Academy of Sciences, Washington, D.C., 3 April 2000.
- 205. **Corbett, J.J.**, and B. Remley, Marine Ferries and Emissions, *Society of Naval Architects and Marine Engineers*, *Ship Machinery Committee*, invited presentation, Arlington, VA, 30 March 2000.
- 206. Skjølsvik, K.O., A.B. Andersen, **J.J. Corbett**, and J.M. Skjelvik, Study of Greenhouse Gas Emissions From Ships, *International Maritime Organization, Marine Environment Protection Committee 44*, London, UK, 6 March 2000.
- 207. Corbett, J.J., Issues in Greenhouse Gas Emissions Control, Transportation Research Board, 79th Annual

- *Meeting*, GHG Study for International Shipping: Modal Comparisons, Session 230, Washington, DC, 11 January 2000.
- 208. **Corbett, J.J.**, presentation: Emissions Monitoring Protocols for Commercial Ships, poster: A Ferry to the 21_{st} Century: The Future of Waterborne Passenger Transportation in the United States, poster: A Greenhouse Gas Study for International Ships, *Marine Transportation System R&D Coordination Conference*, National Academy of Sciences, 2-4 November 1999.
- 209. **Corbett, J.J.**, Emissions from Commercial Shipping: Engineering Assessments in Dialogue with Science and Policy Questions, *University of Michigan, Department of Naval Architecture and Marine Engineering*, invited seminar, 25 October 1999.
- 210. **Corbett, J.J.**, Emissions From Ships: Current and Emerging Engineering, Science and Policy Issues, *American Society of Mechanical Engineers Internal Combustion Engine Division Fall Technical Conference*, invited panel presentation, Ann Arbor, Michigan, 19 October 1999.
- 211. **Corbett, J.J.**, Ship Aerosol Emissions and Their Control, *American Association for Aerosol Research*, Tacoma, Washington, 11-15 October 1999.
- 212. **Corbett, J.J.**, Emissions from Ships: A Dialogue Between Engineering, Science and Policy Research, *University of Delaware, College of Marine Studies*, invited seminar, 9 September 1999.
- 213. **Corbett, J.J.**, Emissions from Commercial Shipping: Scientific and Policy Issues, *Naval Postgraduate School, Monterey*, CA, invited presentation, 12 August 1999.
- 214. **Corbett, J.J.**, Ship Propulsion Emissions: Technology and Policy Issues, *Transportation Research Board, Summer Waterways and International Trade Meeting*, Duluth, MN, 26 July 1999.
- 215. **Corbett, J.J.**, Ship Propulsion Emissions: Technology and Policy Issues, *Maritime Administration, U.S. Department of Transportation*, invited presentation, 20 July 1999.
- 216. **Corbett, J.J.**, Emissions from Commercial Shipping: Scientific and Technology-Policy Issues, *National Oceanic and Atmospheric Administration (NOAA)*, invited seminar, Boulder, CO, 7 April 1999.
- 217. **Corbett, J.J.**, A Global Sulfur Emissions Inventory For Oceangoing Ships And Its Impact In Global Chemical Transport Models, *International Aerosol Conference*, Edinburgh, Scotland, Sept. 1998.
- 218. **Corbett, J.J.**, Nitrogen and Sulfur Emissions from Oceangoing Ships, *U.S. Environmental Protection Agency*, invited presentation, Washington, DC, 11 June 1998.
- 219. **Corbett, J.J.**, Marine Air Pollution: The Next Compliance Problem, *U.S. Merchant Marine Academy Continuing Education Seminar*, April 1998.
- 220. **Corbett, J.J.**, presentation at *NSF Center for Human Dimensions in Global Change Annual Workshop*, Carnegie Mellon University, Pittsburgh, PA, May 1998.
- 221. **Corbett, J.J.**, Session Chair for Technology vs. the Teacher, Panel Discussant for Reflections on Research Ethics Education, *Association for Practical and Professional Ethics*, *Annual Meeting*, Dallas, TX, Feb 1998.
- 222. **Corbett, J.J.**, Nitrogen and Sulfur Emissions from Oceangoing Ships, *American Geophysical Union, Fall Meeting*, San Francisco, December 1997.
- 223. **Corbett, J.J.**, Presentation at *NSF Workshop for Graduate Research Ethics Education*, Indiana University, July 1997.
- 224. **Corbett, J.J.**, Ship Air Emissions: Estimation and Regulation, *Department of Energy Diesel Engine Emission Reduction (DEER) Workshop*, UC San Diego, June 1997.
- 225. **Corbett, J.J.**, presentation at *NSF Center for Human Dimensions in Global Change Annual Workshop*, Carnegie Mellon University, Pittsburgh, PA, May 1997.
- 226. **Corbett, J.J.**, Career Transition Issues and BRAC Closures, *UCSC Extension Seminar on Environmental Careers*, July 1995.
- 227. Koerner, C, and **J.J. Corbett**, Discrete Interval Groundwater Sampler, *HAZMACON '92, Hazardous Materials Mgmt Conference*, San Francisco, April 1992. Also presented at *Naval Engineering West Coast Multi-Redcom Technical Training Symposium*, San Francisco, March 1992.

RESEARCH CONTRACTS, FELLOWSHIPS

- 1. Co-Principal Investigator, Blockchain Technology and the Disruption of Maritime Shipping: An Exploration of Potential Impacts for the U.S. Maritime Transportation Sector, Total budget for this project is \$125,000 (UD \$49,670), US Department of Transportation Maritime Administration, 2018-2019.
- 2. Co-Principal Investigator, Port Electrification: An Assessment of Environmental, Economics, and Employment Impacts, Total budget for this project is \$150,000 (UD \$99,978), US Department of Transportation Maritime Administration, 2018-2019.
- 3. Principal Investigator, Korean Institute of Marine Science and Technology (KIMST), 17,000, Nov 2019-June 2020.
- 4. Freight Transportation Research Activities, Delaware Department of Transportation, \$19,106, 2018-2019.

- 5. Co-Principal Investigator, Total Fuel Cycle Analysis for Methanol for Ships, U.S. Department of Transportation, Maritime Administration, \$60,000, 2017-2018.
- 6. Freight Transportation Research Activities, Delaware Department of Transportation, \$19,500, 2017-2018.
- 7. Co-Principal Investigator, Alternative Fuels Usage in Maritime Transportation Systems, Mid-Atlantic Transportation Sustainability Center Region 3 (MATS UTC) through Delaware Center for Transportation, U.S. Department of Transportation, \$34,691 (project portion), 2014.
- 8. Co-Principal Investigator, Evaluation of Methane Leakage and Slip for Port-Ship Interface Processes Involving CNG/LNG Marine Transportation Systems, U.S. Department of Transportation, Maritime Administration, \$150,000, 2014-2015.
- 9. Co-Principal Investigator, National Science Foundation, Coastal SEES (Track 2), Collaborative Research: Changes in ship-borne invasions in coupled natural-human systems: infrastructure, global trade, climate and policy, David Lodge (Notre Dame), Nitesh Chawla (Notre Dame), Erin K Grey (Notre Dame), Michael E Pfrender (Notre Dame), Thanuka Wickramarathne (Notre Dame), and James Corbett (UD), September 2013 through August 2018 (NCE through August 2020), \$300,269 (UD portion).
- 10. Co-Principal Investigator, Total Fuel Cycle Analyses for ShortSea Shipping:LNG/CNG Emissions Assessment, U.S. Department of Transportation, Maritime Administration, \$100,000, 2013-2014.
- 11. Co-Principal Investigator, Further Development and Delivery of the Geospatial Intermodal Freight Transportation (GIFT) Model, U.S. Department of Transportation, Maritime Administration, \$80,000, 2013-2014.
- 12. Co-Principal Investigator, Alternative Fuel Analyses for Great Lakes Shipping: Multi-Fuel Performance Assessment, University portion of project \$36,077, Great Lakes Maritime Research Initiative (GLMRI), UD Subcontract to Rochester Institute of Technology, May 2012 through December 2012.
- 13. Principal Investigator, Modeling Support for US. EPA Heavy Duty Emission Standard Rulemaking, University portion of project \$10,000 funded by the U.S. EPA through GIFT Solutions LLC, 2011-2012.
- 14. Principal Investigator, Analysis of Potential Environmental Consequences of Expanded Panama Canal Shipping With East Coast Short Sea Scenario, University portion of project \$18,000 funded by the Environmental Defense Fund through GIFT Solutions LLC, 2011-2012.
- 15. Principal Investigator, Further Development and Delivery of the Geospatial Intermodal Freight Transportation (GIFT) Model, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$146,057, 2010-2012; cooperative agreement term 2010-2015.
- 16. Co-Principal Investigator, Potential Climate Impacts on Cargo Flows to Region, \$10,000, 2010-2011.
- 17. Co-Principal Investigator, Application of Freight Transportation and Decision Models to Scope and Compare Freight Infrastructure Investment, \$108,194, 2009-2013.
- 18. Co-Principal Investigator, Development of a web-based energy and emissions calculator for MARAD, U.S. Maritime Administration, \$90,000, 2009-2010.
- 19. Co-Principal Investigator, Infrastructure Performance Improvement to Reduce Corridor Delays for Freight Flows: Application of Geospatial Intermodal Freight Transportation Mode, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$300,000, 2008-2010.
- 20. Co-Principal Investigator, Energy, Economic, and Environmental Tradeoffs Associated With Freight Transportation In the Great Lakes Region, for the Great Lakes Maritime Research Institute, \$16,352 of \$80,000 with Rochester Institute of Technology, 2008-2009.
- 21. Principal Investigator, Environmental Benchmarks Project, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$98,362, 2008-2009.
- 22. Co-Principal Investigator, Development of Geospatial Intermodal Freight Transport Model for East Coast Freight Movement, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$142,187, 2008-2009.
- 23. Co-Principal Investigator, Development of a California Geospatial Intermodal Freight Transport Model with Cargo Flow Analysis, State of California Air Resources Board, Research Division, \$199,937, 2008-2009.
- 24. Co-Principal Investigator, Application of freight transportation and decision models to scope and compare freight infrastructure investment, US Department of Transportation University Transportation Center, \$36,360, 2008-2009.
- 25. Principal Investigator Improved Geospatial Forecasting of Commercial Marine Vessels, Research Division, State of California Air Resources Board, \$47,959, 2007-2009.
- 26. Principal Investigator, Delaware regional freight data for Geographic Intermodal Freight Transportation (GIFT) Model, US Department of Transportation University Transportation Center, \$30,560, 2007-2008.
- 27. Principal Investigator, MARAD Emissions Incentive Program, second task under 5-year (2005-2010) Cooperative Agreement with the United States Department of Transportation, Maritime Administration, Office of Environmental Activities, \$15,000, 2005-2007.
- 28. Co-Principal Investigator, Emissions Analysis of Freight Transport Comparing Land-Side and Water-Side Short-Sea

- Routes: Development and Demonstration of a Decision Modeling Tool, Center for Climate Change and Environmental Forecasting, U.S. Department of Transportation, funded by Research and Special Programs Administration (RSPA), \$155,441, 2005-2007.
- 29. Principal Investigator, MARAD Emissions Incentive Program, first task under 5-year (2005-2010) Cooperative Agreement with the United States Department of Transportation, Maritime Administration, Office of Environmental Activities, \$50,000, 2005-2006.
- 30. Principal Investigator, Estimation, Validation, and Forecasts of Regional Commercial Marine Vessel Inventories, Research Division, State of California Air Resources Board, \$48,169, 2005-2006.
- 31. Co-Principal Investigator, Application of Decision Support Model to Reduce the Risk of Introduction of Aquatic Organisms by Maritime Commerce, Delaware Sea Grant, \$218,447, 2004-2007.
- 32. Co-Principal Investigator, Evaluating Commercial Vessel Traffic Characteristics and Whale Strike Probabilities Along the North Atlantic, National Oceanic and Atmospheric Administration (NOAA), \$375,778, 2004-2007.
- 33. Principal Investigator, Contract for Consultant Services related to North American Ship Inventory, Commission on Environmental Cooperation, \$25,000 augmenting ARB contract and scope, 2005.
- 34. Co-Principal Investigator, DOT Center for Climate Change and Environmental Forecasting Climate Change and Transportation Research: Total Fuel Cycle Emissions for Marine Transportation: Development of a "Well-To-Hull" Modeling Tool, U.S. Department of Transportation, with Rochester Institute of Technology, funded by Research and Special Programs Administration (RSPA), \$99,940, 2004-2005.
- 35. Principal Investigator, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries, with Rutgers State University of New Jersey, funded by Federal Transit Administration, \$121,158, 2003-2004.
- 36. Principal Investigator, Verification of Ship Emissions Estimates with Monitoring Measurements to Improve Inventory and Modeling, Research Division, State of California Air Resources Board, \$49,901, 2002-2004.
- 37. Principal Investigator, National Ferry Database Program for MARAD, Maritime Administration funds through Prime, Inc., \$6,824, 2002-2003.
- 38. Principal Investigator, Vessel Emissions Measurement Protocols and Decision Framework, Maritime Administration funds through Marine Chemist & Environmental Consultants, Inc., \$53,000, 2002-2003.
- 39. Principal Investigator, Sea Carrier Outreach Meeting, hosted by the University of Delaware, partially funded by Business for Social Responsibility, \$1,470, 2002.
- 40. Principal Investigator, Developing Environmentally & Socially Responsible Private Sector Policies for International Waterborne Cargo, Business for Social Responsibility Education Fund, \$60,325 (03 May 2001 30 April 2002).
- 41. Principal Investigator from Carnegie Mellon in research collaboration with Norwegian Marine Technology Research Institute, Det Norske Veritas, and Center for Economic Analysis, funded by the International Maritime Organization.
- 42. Principal Investigator, Nationwide Inventory of Emissions from CI Marine Engines, Review of EPA NONROAD Marine Module, U.S. EPA Contract Order Number 8A-0516-NATX.
- 43. U.S. EPA STAR (Science To Achieve Results) Fellowship (No. U-915180-01-0), 1997).

ACADEMIC AND COMMUNITY SERVICE

- 1. Chair, Committee on Marine Environment, AW030, Transportation Research Board, 2018-2021.
- 2. Chair, College 50th Anniversary Event Planning Committee, March 2020-present.
- 3. Secretary, UD Graduate College Council, term July 2019-August 2020.
- 4. Executive Committee, UD Graduate College Council, term July 2019-August 2020 subject to renewal.
- 5. Member, UD Graduate College Council, term July 2019 August 2021 subject to renewal.
- 6. Member, SMSP Graduate Curriculum Committee, term 2019-2021 subject to one-year extension.
- 7. Instructor, World Tang Soo Do Association, Shoshin Karate Academy, 2020-present.
- 8. Board member, Westminster House, 2019-present.
- 9. Board Member Port of Wilmington Maritime Society, 2010-present.
- 10. School of Marine Science and Policy (SMSP) Director's Council, Associate Director for Marine Policy, 2014-2019.
- 11. Tenure Review, University of Sharjah, United Arab Emirates, 2018.
- 12. Council of Fellows Delaware Environmental Institute, 2015-2017.
- 13. Reviewer, "Ocean Going Vessel Emissions Final Report", ICF report for Australian Marine Environment Protection Agency (AUSMEPA), October 2017.
- 14. International Reviewer, Research Council of Norway, "Digitalization in maritime transport for improved cost and energy efficiency", February 2018.
- 15. International Reviewer, Research Council of Norway, "New Highway Ferry Concepts", February 2018.
- 16. Search Committee, CEOE/SMSP search for Sea Grant Director, 2017.
- 17. Search Committee, CEOE Dean search, 2017.
- 18. Vice Chair, Committee on Marine Environment, AW030, Transportation Research Board, 2017-2018.

- 19. Member, Expert Steering Committee for the Fuel Oil Availability Review, International Maritime Organization, London, UK, 2015-2016.
- 20. International Reviewer, Netherlands Organization for Scientific Research, "Waterway-adapted Inland Ships WISH", October 2014.
- 21. Invited Expert Reviewer, Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2012, US EPA, 2014.
- 22. Member, TRB Committee TRB-SASP-12-09, Reinvesting in Inland Waterways: What Policy Makers Need to Know, 2013 to 2015.
- 23. Conference Program Chair, International Bunker Conference, Oslo, Norway, 2012 and Gothenburg, Sweden, 2013.
- 24. Member, International Academic Advisory Council, Coastal and Ocean Management Institute (COMI), Xiamen University, 2012-2014.
- 25. Expert Consultant to U.S. EPA Advisory Council on Clean Air Compliance, Report to Congress on Black Carbon, 2011.
- 26. School of Marine Science and Policy (SMSP) Promotion and Tenure Committee, 2009-2011 extended Chair to 2012.
- 27. Member, Committee on Marine Environment, AW030, Transportation Research Board, 2006-2013, 2017-2019.
- 28. Member, Committee on Transportation Energy, ADC70, Transportation Research Board, 2008-2011.
- 29. University of Delaware Search Committee for Director of Disaster Research Center, 2009-2010.
- 30. College of Earth, Ocean, and Environment Search Committee for Geography Faculty, 2009-2010.
- 31. Moderator/Facilitator, Freight Breakout Group, Creating Climate Wealth Summit, Georgetown University McDonough School of Business, Washington, DC, 20-22 April 2010.
- 32. Member, Transportation experts group for the U.S. Chamber of Commerce's Infrastructure Index Project, Chicago, IL, March 2010.
- 33. Member, Study Group Panel on Reduction of Greenhouse Gas Emissions in Ocean-Going Shipping, Japan International Transport Institute, sponsored by Nippon Foundation, 2008-2009.
- 34. Technical Advisor, Model Evaluation, Multi-Phase Study On Firefighter Safety and the Deployment Of Resources, Assistance to Firefighters Grant Fire Prevention and Safety, National Institute of Standards and Technology (NIST), Worcester Polytechnic Institute, International Association of Fire Fighters, 2006-2009.
- 35. Comments to U.S. EPA Oil Program regarding Proposed Amendments to the SPCC Rule, submitted by James J. Corbett, Jr., P.E., Ph.D., Assistant Professor, University of Delaware, Newark, DE, 2006. United States Senate, Committee on Environment and Public Works, EPA's Spill Prevention Control and Countermeasure Program Hearing, http://epw.senate.gov/hearing_statements.cfm?id=249640, testimony by J.J. Corbett, 14 December 2005.
- 36. Faculty Senate Rules Committee, University of Delaware, 2004-2006; second appointment, 2006-2008.
- 37. College of Marine Studies, Futures Committee, 2003 and 2005-2006.
- 38. Member, Transit Cooperative Research Program (TCRP) Project J-10H, *Security Measures for Ferry Systems*, National Academy of Sciences, Washington, DC, March 2004 2006.
- 39. Member, Marine Environmental Task Force, Transportation Research Board, 2003-2006.
- 40. Member, Surface Transportation Environmental Cooperative Research Program Advisory Board, *Environmental Research Needs in Transportation: Report of a Conference*, Transportation Research Board, National Academies, Washington, DC, 2002.
- 41. Co-chair M-17 Environmental Panel, Ship Machinery Committee, Society of Naval Architects and Marine Engineers (SNAME), 2000 2007.
- 42. Wrote Pollution Prevention examination item for National Principles and Practices Engineering Examination in Naval Architecture and Marine Engineering, 2003.
- 43. College of Marine Studies, Academic and Professional Staff Search Committees, 2000-2002.
- 44. Department of Transportation, Global Climate Change Research Roundtable, Washington, DC, 2000.
- 45. Member, Committee on Military Transportation (A1B11), Transportation Research Board, National Research Council, February 1999 January 2002.
- 46. Carnegie Mellon Leadership Initiative, "Ethics, Leadership, and Technical Decision Making," 1999.
- 47. University Education Taskforce, Carnegie Mellon University, 1998-1999.
- 48. Rotary Ethics Conferences, Pittsburgh, PA, 1997 and 1999.
- 49. Research Experience for Undergraduates (REU), Seminars in Research Ethics, 1998-1999.
- 50. Center for Neurological & Biological Cognition (CNBC) Summer Research Ethics Seminars, 1998-1999.

ACADEMIC, PROFESSIONAL, AND MILITARY AWARDS

- 1. Distinguished Alumni Award, California State University Maritime (California Maritime Academy), 2017.
- 2. Paul Harris Fellow, "in appreciation of tangible and significant assistance given for the furtherance of better understanding and friendship between peoples of the World," Rotary International, December 2008.
- 3. American Chemical Society (ACS) Publications recognition as one of the top 20 Most-Accessed Articles for "Mortality from Ship Emissions: A Global Assessment", published in *Environmental Science & Technology* for the full year of 2007, for the fourth Quarter of 2007, and for the first Quarter of 2008.

- 4. American Chemical Society (ACS) Publications recognition as one of the top 20 Most-Accessed Articles for "Cost-Effectiveness of Reducing Sulfur Emissions from Ships", published in *Environmental Science & Technology* for the fourth Quarter of 2007.
- 5. Elsevier publications recognition as one of the "Top 25 Hottest Articles" for "Costs and Benefits of Reducing SO₂ Emissions from Ships in the US West Coastal Waters", published in *Transportation Research Part D: Environment*, for October-December 2007, and January-March 2008.
- 6. Fall 2004 Institute Fellow, Institute for Transforming Undergraduate Education, Problem-Based Learning: From Ideas to Solutions through Communication.
- Letter of Appreciation for Review of Draft Report: Quantification Of Emissions From Ships Associated With Ship
 Movements Between Port In The European Community, from Nicola Robinson representing Directorate General for
 Environment, May 2002.
- 8. Certificate of Appreciation, for contributions to the workshop on Maritime Energy and Clean Emissions, from Maritime Administrator Captain William Shubert, January 2002.
- 9. Certificate of Appreciation for contributions to Marine Environmental Engineering Technology Symposium (MEETS) 2001, American Society of Naval Engineers and Society of Naval Architects and Marine Engineers, June 2001.
- Letter of Appreciation for Review of Section 9, Air Quality Social Damages, Environmental Costing Model for Outer Continental Slope leasing program, from William King, Economist for Minerals Management Service, October 2000.
- 11. Outstanding Student Paper Award for "Nitrogen and Sulfur Emissions from Oceangoing Ships," Atmospheric Sciences Section, American Geophysical Union, 1997 AGU Fall Meeting, Dec. 1997.
- 12. Herb Toor Award for Outstanding Qualifier Paper: "Ship Air Emissions: Estimation and Regulation," Dept. of Engineering and Public Policy, Carnegie Mellon University, 1997.
- 13. Letter of Commendation, Rear Admiral R.G. Gilbertson, Department of the Navy, for Naval Reserve Engineering Duty course development and instruction of the Supervisor of Shipbuilding (SUPSHIP) Operations Manual Course, 1997.
- 14. Armed Forces Reserve Medal, for service in the USNR, 1997.
- 15. Navy Achievement Medal for professional achievement and engineering support to Naval Communications Station Stockton, Environmental Management Division, 1995.
- 16. Navy Achievement Medal for professional achievement as event coordinator during Fleet Week 1990.
- 17. Navy Achievement Medal for professional service as a member of the Naval Base Emergency Operations Center Crisis Response Team during the 1989 Loma Prieta Earthquake.
- 18. Humanitarian Service Medal for voluntary mobilization to the Emergency Operations Center, Naval Base San Francisco, 1989.
- 19. Certificate of Commendation from Naval Reserve Readiness Command Region Twenty, 1989.
- 20. Founders Award for Professional Contribution to the Engineering Duty Officer School, Reserve Course 92R-1, March 1992.
- 21. Individual Achievement Award for conceptual model for environmental retraining of workers displaced from closing military bases, Radian Corp., September 1994.
- 22. Individual Achievement Award for project contributions, Radian Corp., October 1992.
- 23. Individual Achievement Award for Groundwater Sampling Vehicle, Radian Corp., June 1991.

PROFESSIONAL AFFILIATIONS

National Society of Professional Engineers, American Geophysical Union, Transportation Research Board, World Tang Soo Do Association (E Dan)

STUDENTS ADVISED (completion dates shown if applicable) Advisor:

- 1. **Ph.D. Students, graduated**: Chengfeng Wang, College of Marine Studies, A Study Of Geographical Characterization Of Ship Traffic And Emissions And Cost-Effectiveness Of Reducing Sulfur Emissions From Foreign Waterborne Commerce For The U.S. West Coast, 2006; Mark Baylor, Ph.D. student, Marine Policy CMES, A Model for Maximizing Port Stakeholder Value of Modal Infrastructure Alternatives, 2010; Haifeng Wang, Ph.D., Marine Policy CMES, Shipping Economics, Global Trade, And Economic Response To Environmental Policy 2010; Eric Deans, Ph.D., Marine Policy, CEOE, Cargo Flow Dynamics Influenced by the Expansion of the Panama Canal, 2011; Amit Mokashi, Ph.D., Marine Policy SMSP, An Analysis Of Voluntary Environmental Actions For Marine Highways A Stakeholder Perspective, 2012; Gerald Kauffman, Ph.D., Marine Policy SMSP, Governance, Policy, And Economics Of Clean Water In The Delaware River Basin, 2014.
- 2. M.S. Students, graduated: Christine Miller, An Institutional Analysis of the Organizations Responsible for Aspects of Coastal Management on Two Eastern Caribbean Islands, M.S. Marine Policy, December 2003; Kinam Leong, Pilotage as a Measure for Preventing Accidental Oil Pollution in the Korean Straits, M.S. Marine Policy, May 2004; Joana Tavares, M.S. student, Marine Policy Program, Assessing the Importance Of Biological Uncertainties to the Control of Species Introductions Via Ballast Water, co-advisor, May 2007; Nicole Cass, Ph.D. candidate, Role Of Risk Based Decision Making In Achieving Ballast Water Policy Goals In Maritime Transportation, Marine Policy Program, December 2010, Melissa Theis, M.S. candidate, Innovative Solutions for Environmental Challenges in the Marine Industry Reducing Air Emissions From Container Vessels Through Industry-based Policy Method, 2011; Wei Huang, M.S. Marine Policy, Regional Economic and Environmental Analysis as a Decision Support for Strategic Marine Planning in Xiamen, 2013; Edward Carr, Marine Policy SMSP, May 2015; Adam Disque, Marine Policy SMSP, May 2016.
- 3. **Ph.D. Students, in progress**: Zhaojun Wang, matriculating since 2017.
- 4. **M.S. Students, in progress**: <u>Julie Steinberg</u>, M.M.P. SMSP, expected May 2017.

Committee Member:

- Ph.D. Students, graduated: Cynthia Stahl, Urban Affairs CEEP, Environmental Decision Analysis with Multicriteria Integrated Resource Assessment (MIRA), May 2003; Dohoon Kim, Marine Policy, Bioeconomic Analysis of Alternative Management Policies for the United States Gulf of Mexico Reef Fish Fishery, May 2003; Steve Thur, Marine Policy, Valuing Recreational Benefits in Coral Reefs Marine Protected Areas: An Application to the Bonaire National Marine Park, January 2004; Chunling Chen, Marine Policy, Game-theoretic Approaches to the Joint Management of Chub Mackerel in Northeast Asian Seas, February 2004: Tom Street, Ph.D., Marine Policy, Submerged Historical and Archaeological Resources: A Study of the Conflict and Interface between United States Cultural Resource Law and Policy and International Governance Measures, April 2007; Yukun Dong, Ph.D., Civil and Environmental Engineering, Assessing Financial Analysis Strategies for Infrastructure Renewal in Regional Transportation Planning, Winter 2008; Catherine Barton, Ph.D. student, Civil and Environmental Engineering, Quantitative Analysis of Uncertainty in Equipment Leak Emissions and the Effect on Risk-Based Decision Making, August 2008; Michelle Oswald, Ph.D., Civil and Environmental Engineering, Development Of A Decision Support Tool For Transportation Adaptation Practices In Response To Climate Change, 2011; Nathaniel Pearre, Ph.D., Marine Policy, Location, Duartion, And Power; How Americans' Driving Habits And Charging Infrastructure Inform Vehilce-Grid Interactions, 2013; Sara Patterson, Ph.D., Civil and Environmental Engineering, Methodology For Determining The Trade-Offs Associated With Complete Street Design With Respect To Delay And Emissions Within The Transportation Network, 2013; Chuoran Wang, Ph.D., Civil and Environmental Engineering, Evaluation Of Data Inputs And Sensitivity Analysis Of The Moves Mobile Emission Inventory Model, 2013; Eric Best, Ph.D., Disaster Science and Management, Incorporating Groups, Collective Behavior, And Information Visualization In Agent-Based Models Of Evacuation, 2013; Edward Carr, Ph.D. Marine Studies, December 2017.
- 2. M.S. Students, graduated: Jae-Hyung Ryoo, M.M.P. Marine Policy, An Analysis of Port Development Strategy in Korea, May 2002; Danielle Tesch, M.M.P. Marine Policy, National Level Adaptation Policies of Small Island States in the Pacific and Caribbean, May 2003; Seong-Yong Choi, M.M.P. Marine Policy, An Analysis of Port-State Control Activities in the Tokyo MOU Region, May 2003; Jennifer Harris, M.M.P. Marine Policy, An Assessment of Compensatory Wetlands Mitigation Policy in the United States Focusing on State Regulation, August 2003; Haikwang Kim, M.M.P. Marine Policy, Determination of Minimum Safe Manning For Korean Vessels, May 2004; Tom Schuster, M.S. Urban Affairs CEEP, Transportation And Sustainability: The Potential Contribution Of Shared-Use Automobile Systems, May 2004; Meredith Blaydes, M.M.P. Marine Policy, Analysis of the Frequency and the Severity of Recreational Boating Accidents Occurring Around Jettied and Non-Jettied Inlets Along the East Coast, December 2005; Andrea Geiger, M.M.P. Marine Policy, To Investigate The Differences In Flood Insurance Premiums Between Private Flood Insurance Companies And The National Flood Insurance Program For Areas With Similar Flood Risk., May 2006; Charles Mitchell, M.S., Civil and Environmental Engineering, Impact Of The Expansion Of The Panama Canal: An Engineering Analysis, 2011; Kateryna Samoteskul, M.S. Marine Policy, Analyzing Costs And Benefits Of Rerouting Vessel Traffic To Open

Areas For Offshore Wind Development In The Mid-Atlantic United States, 2013; Steven Hulse, M.S. Marine Policy, Challenges to Effective Tuna Management in the Western and Central Pacific Ocean; How the Western and Central Pacific Fisheries Commission can become a model for Tuna Regional Fisheries Management Organizations, 2013; Chunjing Liu, Disaster Science and Management, May 2014;