

RICHARD G. NEWELL

Resources for the Future
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EDUCATION

Ph.D., Harvard University, Public Policy (Environmental and Resource Economics)	1997
M.P.A., Princeton University, Woodrow Wilson School, Public Policy	1990
B.S., Rutgers University, College of Engineering, Materials Engineering, Tau Beta Pi	1988
B.A., Rutgers University, Rutgers College, Philosophy, Phi Beta Kappa	1988

PROFESSIONAL POSITIONS

President and CEO, Resources for the Future, Washington, DC	2016–present
Administrator, U.S. Energy Information Administration, US Department of Energy, Washington, DC	2009–2011
Gendell Professor of Energy and Environmental Economics, Nicholas School of the Environment, Duke University, Durham, NC	2007–2016
Professor of Economics, Department of Economics, Duke University	2011–2016
Professor of Public Policy, Sanford School of Public Policy, Duke University	2013–2016
Director, Duke University Energy Initiative, Duke University	2011–2016
Director, Energy Data Analytics Lab, Duke University	2014–2016
Senior Economist for Energy and Environment, President’s Council of Economic Advisers, Executive Office of the President, Washington, DC	2005–2006
Senior Fellow, Resources for the Future, Washington, DC	1997–2006
Ian Axford Fellow, New Zealand Fulbright Program, Wellington, New Zealand	2004
Teaching Fellow, Harvard University, Cambridge, MA	1993–1997
Senior Associate, ICF Incorporated, Fairfax, VA	1990–1993

PROFESSIONAL AFFILIATIONS

Adjunct Professor, Nicholas School of the Environment, Duke University	2016–present
Member, Cochairs’ Coordinating Committee, National Petroleum Council, US Department of Energy, Washington, DC	2016–present
Member, Board of Directors, Resources for the Future, Washington, DC	2011–present
Research Associate, National Bureau of Economic Research	2008–present
Member, International Advisory Council, King Abdullah Petroleum Studies and Research Center, Riyadh, Saudi Arabia	2015–present
Co-Editor, <i>Review of Environmental Economics and Policy</i>	2013–present
Associate Editor, <i>Journal of Economic Perspectives</i>	2014–present
Chair, Committee on Assessing Approaches to Updating the Social Cost of Carbon, National Academy of Sciences, Washington, DC	2015–present
Member, Board on Environmental Change and Society, National Academy of Sciences, Washington, DC	2014–present
Member, North Carolina Energy Policy Council, Raleigh, NC	2013–2015

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University Fellow, Resources for the Future, Washington, DC	2007–2016
Vice President, Association of Environmental and Resource Economists (AERE)	2013–2015
Member, Policy Roundtable of the Behavioral and Social Sciences, National Academy of Sciences, Washington, DC	2013–2015
Member, Study Committee, American Academy of Arts and Sciences Project on the Alternative Energy Future	2011–2014
Contributing Author, IPCC Fifth Assessment Report, Working Group III	2011–2014
Lead Author, US National Climate Assessment, Effects on Energy Production	2011–2014
Member, Editorial Board, Review of Environmental Economics and Policy	2011–2013
Member, Coordinating Sub-Committee, National Petroleum Council (NPC) Study on the Future of Transportation Fuels, Washington, DC	2010–2012
Member, Coordinating Sub-Committee, NPC Study on North American Resource Development, Washington, DC	2010–2011
Member, Steering Committee, Quadrennial Energy Technology Review, US Department of Energy, Washington, DC	2010–2011
Committee on Energy Externalities, National Academy of Sciences	2008–2009
Board Member, Association of Environmental and Resource Economists (AERE)	2008–2009
Advisory Board, Princeton Carbon Mitigation Initiative, Princeton University, Princeton, NJ	2007–2009
Editorial Council, <i>Journal of Environmental Economics and Management</i>	2007–2009
Advisory Board, Progressive Automotive X-Prize	2006–2009
Editorial Board, <i>Energy Economics</i>	2003–2009
Affiliate, Motu Economic and Public Policy Research, Wellington, New Zealand	2003–2009
Advisory Board, Study on the Energy Efficiency Potential of the Appalachian Region	2007–2009
Chair, Workshop on the Economics of Climate Change, National Academy of Sciences	2008
Committee on Energy Efficiency Standards, National Academy of Sciences	2007–2009
Committee on Geopolitics & Policy, NPC Global Oil & Gas Study	2006–2007
Committee on NSF Innovation Inducement Prizes, National Academy of Sciences	2006–2007
Committee on the Benefits of Energy R&D, National Academy of Sciences	2005–2007

PUBLICATIONS

Journal Articles

- Gerarden, T.D., R.G. Newell, and R.N. Stavins. forthcoming. Assessing the energy-efficiency gap. *Journal of Economic Literature*.
- Newell, R.G. and J. Siikamäki. 2015. Time preferences and energy efficiency. *American Economic Review* 105(5): 196-200.
- Gerarden, T.D., R.G. Newell, and R.N. Stavins. 2015. Deconstructing the energy efficiency gap: Conceptual frameworks and evidence. *American Economic Review* 105(5): 183-186.
- Pizer, W., M. Adler, J. Aldy, D. Anthoff, M. Cropper, K. Gillingham, M. Greenstone, B. Murray, R. Newell, R. Richels, A. Rowell, S. Waldhoff, J. Wiener. 2014. Using and improving the social cost of carbon. *Science* 346(6214): 189-1190.

RICHARD G. NEWELL (continued)

- Newell, R.G. and J. Siikamäki. 2014. Nudging energy efficiency behavior: The role of information labels. *Journal of the Association of Environmental and Resources Economists* 1(4):555-598.
- Newell, R.G. and D. Raimi. 2014. Implications of shale gas development for climate change. *Environmental Science and Technology* 48:8360-8368.
- Newell, R.G., W.A. Pizer, and D. Raimi. 2014. Carbon market lessons and global policy outlook. *Science* 343:1316-1317.
- Arrow, K.J., M.L. Cropper, C.G., C. Gollier, B. Groom, G.M. Heal, R.G. Newell, W.D. Nordhaus, R.S. Pindyck, W.A. Pizer, P.R. Portney, T. Sterner, R.S.J. Tol and M.L. Weitzman. 2014. Should Governments Use a Declining Discount Rate in Project Analysis? *Review of Environmental Economics and Policy* 8(2):145-163.
- Newell, R.G., Pizer, W.A., and Raimi, D. 2014. Carbon Markets: Past, Present, and Future. *Annual Review of Resource Economics* 6(1): 191-215.
- Arrow, K.J., M.L. Cropper, C.G., C. Gollier, B. Groom, G.M. Heal, R.G. Newell, W.D. Nordhaus, R.S. Pindyck, W.A. Pizer, P.R. Portney, T. Sterner, R.S.J. Tol and M.L. Weitzman. 2013. Determining benefits and costs for future generations. *Science* 341:349-350.
- Newell, R.G., W.A. Pizer, and D. Raimi. 2013. Carbon markets 15 years after Kyoto: Lessons learned, new challenges. *Journal of Economic Perspectives* 27(1):123-146. Prepublication version available as NBER Working Paper 18504, Cambridge, MA.
- Eccles, J.K., L. Pratson, R.G. Newell, E. Williams, and R.B. Jackson. 2012. The impact of geologic variability on capacity and cost estimates for storing CO₂ in deep-saline aquifers. *Energy Economics* 34(5):1569-1579.
- Arimura, T.H., Li, S., R.G. Newell, and K. Palmer. 2012. Cost-effectiveness of electricity energy efficiency programs. *The Energy Journal* 33(2):63-99. Prepublication version available as NBER Working Paper 17556, Cambridge, MA.
- Popp, D and R.G. Newell. 2012. Where does energy R&D come from? Examining crowding out from energy R&D. *Energy Economics* 34(4):980-991. Prepublication version available as NBER Working Paper 15423, Cambridge, MA.
- Aldy, J.E., A.J. Krupnick, R.G. Newell, I.W.H. Parry, and W.A. Pizer. 2010. Designing climate mitigation policy. *Journal of Economic Literature* 48(4):1-32. Prepublication version available as NBER Working Paper 15022, Cambridge, MA.
- Newell, R.G. 2010. The role of markets and policies in delivering innovation for climate change mitigation. *Oxford Review of Economic Policy* 26(2):253-269.
- Gillingham, K., R.G. Newell, and K. Palmer. 2009. Energy efficiency economics and policy. *Annual Review of Resource Economics* 1: 597-619. Prepublication version available as NBER Working Paper 15031, Cambridge, MA.
- Murray, B., R.G. Newell, and W.A. Pizer. 2009. Balancing cost and emissions certainty: An allowance reserve for cap-and-trade. *Review of Environmental Economics and Policy* 3(1): 84-109. Prepublication version available as NBER Working Paper 14258, Cambridge, MA.
- Eccles, J.K., L. Pratson, R.G. Newell, and R.B. Jackson. 2009. Physical and economic potential of geological CO₂ storage in saline aquifers. *Environmental Science and Technology* 43: 1962-1969.
- Newell, R.G. and W.A. Pizer. 2008. Carbon mitigation costs for the commercial building sector: Discrete-continuous choice analysis of multi-fuel energy demand. *Resource and Energy Economics* 30(4):527-539. Prepublication version available as RFF Discussion Paper 05-13, Resources for the Future, Washington, DC.

RICHARD G. NEWELL (continued)

- Newell, R.G. and W.A. Pizer. 2008. Indexed regulation. *Journal of Environmental Economics and Management* 56(3):221-233. Prepublication version available as RFF Discussion Paper 05-62, Resources for the Future, Washington, DC.
- Gillingham, K., R.G. Newell, and W.A. Pizer. 2008. Modeling endogenous technological change for climate policy analysis. *Energy Economics* 30:2734-2753. Prepublication version available as RFF Discussion Paper 07-14, Resources for the Future, Washington, DC.
- Fischer, C. and R.G. Newell. 2008. Environmental and technology policies for climate mitigation. *Journal of Environmental Economics and Management* 55(2):142-162.
- de Coninck, H., C. Fischer, R.G. Newell, and T. Ueno. 2008. International technology-oriented agreements to address climate change. *Energy Policy* 36:335-356.
- Newell, R.G., K.L. Papps, and J.N. Sanchirico. 2007. Asset pricing in created markets. *American Journal of Agricultural Economics* 9(2):259-272.
- Pizer, W.A., D. Burtraw, W. Harrington, R.G. Newell, and J.N. Sanchirico. 2006. Modeling costs of economy-wide versus sectoral climate policies using combined aggregate-sectoral models. *Energy Journal* 27(3):135-168.
- Gillingham, K., R.G. Newell, and K. Palmer. 2006. Energy efficiency policies: A retrospective examination. *Annual Review of Environment and Resources* 31:161-192.
- Jaffe, A.B., R.G. Newell, and R.N. Stavins. 2005. A tale of two market failures: Technology and environmental policy. *Ecological Economics* 54:164-174.
(Reprinted in Albert N. Link, Cristiano Antonelli, eds. 2014. *Recent Developments In The Economics Of Science And Innovation*. Edward Elgar)
- Newell, R.G., W.A. Pizer, and J. Zhang. 2005. Managing permit markets to stabilize prices. *Environmental and Resource Economics* 31:133-157.
- Newell, R.G., J.N. Sanchirico, and S. Kerr. 2005. Fishing quota markets. *Journal of Environmental Economics and Management* 49:437-462.
- Kerr, S. and R.G. Newell. 2003. Policy-induced technology adoption: Evidence from the U.S. lead phasedown. *Journal of Industrial Economics* 51(3):317-343.
(Reprinted in V. McConnell and W. Harrington, eds. 2007. *Controlling Automobile Air Pollution*. *International Library of Environmental Economics and Policy* series, T. Tietenberg and K. Segerson, series eds. Hampshire, UK: Ashgate.)
- Anderson, S.T. and R.G. Newell. 2004. Information programs for technology adoption: The case of energy-efficiency audits. *Resource and Energy Economics* 26(1):27-50.
- Anderson, S.T. and R.G. Newell. 2004. Prospects for carbon capture and storage technologies. *Annual Review of Environment and Resources* 29:109-142.
- Newell, R.G. and W.A. Pizer. 2003. Discounting the distant future: How much do uncertain rates increase valuations? *Journal of Environmental Economics and Management* 46(1):52-71.
- Newell, R.G. and W.A. Pizer. 2003. Regulating stock externalities under uncertainty. *Journal of Environmental Economics and Management* 45:416-432.
- Newell, R.G. and R.N. Stavins. 2003. Cost heterogeneity and the potential savings from market-based policies. *Journal of Regulatory Economics* 23(1):43-59.
- Boyd, J., D. Burtraw, A. Krupnick, V. McConnell, R.G. Newell, K. Palmer, J. Sanchirico, and M. Walls. 2003. Trading cases: Is trading credits in created markets a better way to reduce pollution and protect natural resources? *Environmental Science and Technology* 37(11):217-223.

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- Newell, R.G. and W.A. Pizer. 2003. Uncertain discount rates in climate policy analysis. *Energy Policy* 32(4):519–529.
- Anderson, S.T. and R.G. Newell. 2003. Simplified marginal effects in discrete choice models. *Economics Letters* 81(3):321–326.
- Jaffe, A.B., R.G. Newell, and R.N. Stavins. 2002. Environmental policy and technological change. *Environmental and Resource Economics* 22:41–69.
(Reprinted in Hoel, M., ed. 2004. *Recent Developments in Environmental Economics, Vol. 2*. Cheltenham, UK: Edward Elgar.)
(Reprinted in van den Bergh, C.J.M., K. Button, and P. Nijkamp, eds. 2007. *Environmental Planning, Classics in Planning* series. Cheltenham, UK: Edward Elgar.)
- Newell, R.G. and R.N. Stavins. 2000. Climate change and forest sinks: Factors affecting the costs of carbon sequestration. *Journal of Environmental Economics and Management* 40:211–235.
- Newell, R.G., A.B. Jaffe, and R.N. Stavins. 1999. The induced innovation hypothesis and energy-saving technological change. *Quarterly Journal of Economics* 114(3):941–975.
(Reprinted in Grubler, A., N. Nakićenović, and W.D. Nordhaus, eds. 2002. *Technological Change and the Environment*, pp. 97–126. Washington, DC: RFF Press.)
- Newell, R.G., B.P. Feuston, and S.H. Garofalini. 1989. The structure of sodium trisilicate glass via molecular-dynamics employing 3-body potentials. *Journal of Materials Research* 4(2):434–439.
- B.P. Feuston, R.G. Newell and S.H. Garofalini. 1988. Application of a New Three-Body Potential to Vitreous Silica and Sodium Silicate Glasses. MRS Proceedings, 141, 207 doi:10.1557/PROC-141-207.

Books and Book Chapters

- Newell, R.G., Y. Qian, and D. Raimi. 2015. The Global Energy Outlook 2015. In update to *Energy & Security: Towards a New Foreign Policy Strategy* (2nd ed.), J.H. Kalicki and D.L. Goldwyn, eds. Washington, DC: Johns Hopkins University Press. Prepublication version available as NBER Working Paper 22075, Cambridge, MA.
- Newell, R.G. and S. Iler. 2013. The Global Energy Outlook. In *Energy & Security: Towards a New Foreign Policy Strategy* (2nd ed.), J.H. Kalicki and D.L. Goldwyn, eds. Washington, DC: Johns Hopkins University Press.
- Newell, R.G. 2011. The Energy Innovation System: A Historical Perspective. In *Accelerating Energy Innovation: Insights from Multiple Sectors*. Edited by R.H. Henderson and R.G. Newell. Chicago: University of Chicago Press for the National Bureau of Economic Research.
- Henderson, R.H. and R.G. Newell. 2011. Introduction and Summary. In *Accelerating Energy Innovation: Insights from Multiple Sectors*. Edited by R.H. Henderson and R.G. Newell. Chicago: University of Chicago Press for the National Bureau of Economic Research.
- Popp, D., R.G. Newell, and A.B. Jaffe. 2010. Energy, the Environment, and Technological Change. In *Handbook of the Economics of Innovation Vol. II*, Edited by B.H. Hall and N. Rosenberg. North Holland. Prepublication version available as NBER Working Paper 14258, Cambridge, MA.
- Newell, R.G. 2009. International Climate Technology Strategies. In *Post-Kyoto International Climate Policy: Implementing Architectures for Agreement*. Edited by J.E. Aldy and R.N. Stavins. Cambridge: Cambridge University Press.
- Newell, R.G. and K. Rogers. 2007. The market-based lead phasedown. In *Moving to Markets in Environmental Regulation: Lessons from Twenty Years of Experience*, pp. 173-193. Edited by J. Freeman and C. Kolstad. Oxford: Oxford University Press.

RICHARD G. NEWELL (continued)

- Newell, R.G., A.B. Jaffe, and R.N. Stavins. 2004. The economics of energy efficiency. In *Encyclopedia of Energy, Vol. 2*, pp. 79–90. Edited by C. Cleveland. Amsterdam: Elsevier.
- R.J. Kopp, R.D. Morgenstern, R.G. Newell, and W.A. Pizer. 2004. Stimulating technology to slow climate change. In *New Approaches on Energy and the Environment: Policy Advice for the President*, pp. 14–18. Edited by P.R. Portney and R.D. Morgenstern. Washington, DC: RFF Press.
- Newell, R.G. and K. Rogers. 2004. Leaded gasoline in the United States: The breakthrough of permit trading. In *Choosing Environmental Policy: Comparing Instruments and Outcomes in the United States and Europe*, pp. 175–191. Edited by W. Harrington, R. Morgenstern, and T. Sterner. Washington, DC: RFF Press.
- Kerr, S., R.G. Newell, and J.N. Sanchirico. 2004. Evaluating the New Zealand individual transferable quota market for fisheries management. In *Tradeable Permits Policy Evaluation, Design and Reform*, pp. 121–134. Paris: OECD.
- Jaffe, A.B., R.G. Newell, and R.N. Stavins. 2003. Technological change and the environment. In *Handbook of Environmental Economics, Vol. 1*, pp. 461-516. Edited by K.-G. Mäler and J. Vincent. *Handbooks in Economics* series, K.J. Arrow and M.D. Intriligator, series eds. Amsterdam: North-Holland/Elsevier.
- Jaffe, A.B., R.G. Newell, and R.N. Stavins. 2001. Energy-efficient technologies and climate change policies: Issues and evidence. In *Climate Change Economics and Policy: An RFF Anthology*, pp. 171–181. Edited by M. Toman. Washington, DC: RFF Press.
- Lee, H., R.G. Newell, and R.N. Stavins. 1994. Developments at the interface of U.S. energy and environmental policy. In *Energy and the Environment: Evolving Challenges and Opportunities*, pp. 1–33. Cambridge, MA: Harvard International Energy Studies.

Articles Under Review, Working Papers, and Reports

- Newell, R.G., B. Prest, and A. Vissing. 2016. Trophy hunting vs. manufacturing energy: The price-responsiveness of shale gas. Duke University, Durham, NC.
- Raimi, D. and Newell, R.G. 2016. Local fiscal effects of oil and gas development in eight states. Duke University, Durham, NC.
- Raimi, D. and Newell, R.G. 2016. Local government revenue from oil and gas production. Duke University, Durham, NC.
- Raimi, D. and Newell, R.G. 2016. Dunn County and Watford City, North Dakota: A case study of the fiscal effects of Bakken shale development. Duke University, Durham, NC.
- Raimi, D. and Newell, R.G. 2016. Colorado's Piceance basin: Variation in the local public finance effects of oil and gas development. Duke University, Durham, NC.
2016. A Comparison of Recent IEA and OPEC Outlooks. Introductory Paper to the Sixth IEA IEF OPEC Symposium on Energy Outlooks. International Energy Forum and Duke University Energy Initiative.
- Malof, J., Bradbury, K., Collins, L., and Newell, R. 2016. Automatic Detection of Solar Photovoltaic Arrays in High Resolution Aerial Imagery. Submitted to *Applied Energy*.
- Bradbury, K., Saboo, R., Johnson, T., Malof, J., Zhang, W., Devarajan, W., Collins, L., Newell, R. 2016. Distributed Solar Photovoltaic Array Location and Extent Dataset for Remote Sensing Object Identification. Submitted to *Scientific Data*.
- Knox, M., Bradbury, K., Collins, L., and Newell, R. 2016. NILM system performance over a range of low frequency sampling rates. Submitted to *ACM BuildSys 2016*.

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- Bradbury, K., Knox, M., Collins, L., and Newell, R. 2016. Generating Synthetic Device-level Electricity Consumption Data. Submitted to *ACM BuildSys 2016*.
- Lin, M, Bradbury, K., Newell R, 2016. Energy saving control strategies for conventional domestic water heaters. Final Report to Sunnovations, Inc.
- Malof, J., Hou, R., Collins, L., Bradbury, K., Newell, R. 2015. Automatic Solar Photovoltaic Panel Detection in Satellite Imagery. *2015 International Conference on Renewable Energy Research and Applications (ICRERA)*: 1428–1431. doi:10.1109/ICRERA.2015.7418643
- Czarnek, N., Morton, K., Collins, L., Newell, R., Bradbury, K., 2015. Performance Comparison Framework for Energy Disaggregation Systems. *2015 IEEE International Conference on Smart Grid Communications (SmartGridComm)*: 446–452. doi:10.1109/SmartGridComm.2015.7436341
- Newell, R.G. and Y. Qian. 2015. Global Energy Outlooks Comparison: Methods and Challenges. NBER Working Paper 22075.
2015. A Comparison of Recent IEA and OPEC Outlooks. Introductory Paper to the Fifth IEA IEF OPEC Symposium on Energy Outlooks. International Energy Forum and Duke University Energy Initiative.
- Bielen, D., R.G. Newell, and W.A. Pizer. 2015. Who did the ethanol tax credit benefit? An event analysis of subsidy incidence. NBER Working Paper 21968.
- Newell, R.G. and D. Raimi. 2014. Oil and gas revenue allocation to local government in eight states. NBER Working Paper 21615.
- Newell, R.G. and D. Raimi. 2014. Shale public finance: Local costs and revenues associated with oil and gas development. NBER Working Paper 21542.
2014. A Comparison of Recent IEA and OPEC Outlooks. Introductory Paper to the Fourth IEA IEF OPEC Symposium on Energy Outlooks. International Energy Forum and Duke University Energy Initiative.
- Newell, R.G. and N.E. Wilson. 2005. Technology prizes for climate change mitigation. RFF Discussion Paper 05-33. Washington, DC: Resources for the Future.
- Newell, R.G., W.A. Pizer, and J.-S. Shih. 2004. Estimating the gains to emission trading. Washington, DC: Resources for the Future.
- Chow, J. and R.G. Newell. 2004. Retrospective review of energy R&D programs. Report to the National Commission on Energy Policy. Washington, DC: Resources for the Future.
- Sawyer, D., C. Fischer, and R.G. Newell. 2004. Ecological fiscal reform and energy case study on renewable grid power electricity. National Round Table on Environment and Economy. Ottawa: Marbek Resource Consultants.
- Pizer, W.A., D. Burtraw, W. Harrington, R.G. Newell, and J.N. Sanchirico. 2004. General and partial equilibrium modeling of sectoral policies to address climate change in the United States. Technical report to the Department of Energy. Washington, DC: Resources for the Future.
- Newell, R.G. and J.N. Sanchirico. 2003. Analysis of concentration and consolidation in New Zealand fishing quota markets. Report to the New Zealand Ministry of Fisheries. Washington, DC: Resources for the Future.
- Newell, R.G., J.N. Sanchirico, and S. Kerr. 2003. Evaluating the New Zealand individual transferable quota market for fisheries management. Report to the New Zealand Ministry of Fisheries. Washington, DC: Resources for the Future.

Other Publications

- Newell, R.G. 2011. Securing energy for America's future. *The Hill* Vol. 18 Issue 122, p36.

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- Newell, R.G. 2011. Innovation essential for growing energy demands. *The Hill* Vol. 18 Issue 122, p35.
- Reichman, J, A. Rai, R.G. Newell, and J. Wiener. 2008. Intellectual Property and Alternatives: Strategies for Green Innovation. Prepared for Chatham House, London, UK.
- Newell, R.G. 2008. A U.S. Innovation Strategy for Climate Change Mitigation. Hamilton Project Discussion Paper 2008-15, Brookings Institution, Washington, DC.
- Newell, R.G. and D. Hall. 2007. U.S. Climate Mitigation in the Context of Global Stabilization. Issue Brief 2 in *Assessing U.S. Climate Policy Options*. Washington, DC. Resources for the Future.
- Newell, R.G. 2007. Climate Technology Research, Development, and Demonstration: Funding Sources, Institutions, and Instruments. Issue Brief 9 in *Assessing U.S. Climate Policy Options*. Washington, DC. Resources for the Future.
- Newell, R.G. 2007. Climate Technology Deployment Policy. Issue Brief 10 in *Assessing U.S. Climate Policy Options*. Washington, DC. Resources for the Future.
- Newell, R.G. 2006. What's the big deal about oil? How can we get oil policy right. *Resources* 163:6–10.
(Reprinted in *CURRENT*, July/August 2007 (number 494). Washington, DC: Heldref Publications.)
- Newell, R.G. 2005. The hydrogen economy: Laying out the groundwork. *Resources* 156:20–23.
- Gillingham, K, R.G. Newell, and K. Palmer. 2005. The effectiveness and cost of energy efficiency programs. *Resources* 155:22–25.
- Newell, R.G. and J.N. Sanchirico. 2003. Saving fish and America's fishermen. *Providence Journal*, Dec. 18.
- Sanchirico, J.N. and R.G. Newell. 2003. Catching market efficiencies. *Resources* 150:8–11.
- Newell, R.G. and W.A. Pizer. 2002. Discounting the benefits of climate change policies using uncertain rates. *Resources* 146:15–20.
- Newell, R.G. and W.A. Pizer. 2001. Discounting the benefits of climate change mitigation: How much do uncertain rates increase valuations? Arlington, VA: Pew Center on Global Climate Change.
- Newell, R.G. 2000. Balancing policies for energy efficiency and climate change. *Resources* 140:14–17.
- Berg, M., R. Nevin, and R.G. Newell. 1992. Advance disposal fees: Good theory—bad policy. *Environmental Finance* Spring:83–91.

PROFESSIONAL ACTIVITIES

Peer review

Regular peer reviewer of journal and book submissions, grant proposals, and conference paper submissions, including for: *American Economic Review*, *American Economic Journal: Economic Policy*, American Agricultural Economics Association, Association of Environmental and Resource Economists, Blackwell Publishers, *Climatic Change*, *Climate Policy*, *Contemporary Economic Policy*, Dutch Social Science Research Council, *Ecological Economics*, *Economic Journal*, *Energy Economics*, *Energy Journal*, *Energy Policy*, *Environment and Development Economics*, *Environmental and Resource Economics*, European Association of Environmental and Resource Economists, Intergovernmental Panel on Climate Change, *Journal of Applied Econometrics*, *Journal of Economic Dynamics and Control*, *Journal of Environmental Economics and Management*, *Journal of Policy Analysis and Management*, *Journal of Public Economics*, *NOVA*, *PNAS*, *RAND Journal of Economics*, Research Council of Norway, *Resource and Energy Economics*, RFF Press, *Review of Economic Studies*, *Scandinavian Journal of Economics*, MISTRA Swedish Foundation for Strategic Environmental Research, United Nations University Press, U.S. Department of Energy, U.S. Environmental Protection Agency, U.S. National Science Foundation.

RICHARD G. NEWELL (continued)

Conference, Workshop, and Seminar Presentation

Regular invited speaker, discussant, and participant at national and international conferences, workshops, and seminars including: American Economic Association meetings, Association of Environmental and Resource Economists meetings, National Bureau of Economic Research meetings (Environmental and Energy Economics, Public Policy and Environment, Innovation Policy and the Economy), European Association of Environmental and Resource Economists meetings, Advanced Research Projects Agency-Energy (ARPA-E, Washington, DC), Aspen Institute Energy Policy Forum (Aspen), Aspen Institute Global Energy Forum (Aspen), Aspen Institute Forum on Shale Gas (Aspen), Autumn Energy Conference (Oslo), Biomass Forum (St. Louis), Brookings Institution (Washington, DC), The Business Council, Carnegie Mellon University, Center for Climate Policy Solutions, CERAWEEK (Houston), Conference of the Parties to the United Nations Framework Convention on Climate Change (Milan), Dartmouth College, Duke University, Energy Foundation, Energy Modeling Forum, FLAME Natural Gas Conference (Amsterdam), Fondazione Eni Enrico Mattei (Venice, Milan), Free University (Amsterdam), French Institute of International Relations (Paris), Georgetown University, Georgia Tech University, German Federal Ministry of Education and Science (Chiemsee), Harvard University, Harvard Project on International Agreements (Venice), Helsinki School of Economics (Helsinki), International Association for Energy Economics (Rio De Janeiro), International Energy Agency (Paris), International Energy Forum (Riyadh), International Institute for Applied Systems Analysis (Laxenburg), Institute for Global Environmental Strategies (Tokyo), Global Industrial and Social Progress Research Institute (Tokyo), International Association of Energy Economists, IPEACA, KAPSARC (Riyadh), London School of Economics, Natural Gas Roundtable, North Carolina State University, Ocean Law Project, Organization for Economic Cooperation and Development (OECD, Paris), Pew Center on Global Climate Change, Princeton University, Research Triangle Energy Consortium, Resources for the Future, Shanghai Forum (Shanghai), Stanford University, Swedish Foundation for Strategic Environmental Research (Stockholm), U.S. Association for Energy Economics, U.S.-China Strategic and Economic Dialogue, U.S. Department of Energy, U.S. Energy Information Administration, U.S. Environmental Protection Agency, University of California Santa Barbara, University of Chicago, University of Massachusetts, Texas A&M University, World Energy Congress (Montreal), World Future Energy Summit (Abu Dhabi), World National Oil Companies Congress (London), World National Gas Conference (Buenos Aires), Yale University (New Haven), ZEW (Bonn, Mannheim).

Congressional Testimony

Senate Agriculture, Nutrition, and Forestry Committee <i>Hearing on "Evaluating High Gas Prices and How New Rules and Innovative Farming Can Help"</i>	March 30, 2011
House Natural Resources Committee <i>Hearing on "Harnessing American Resources to Create Jobs and Address Rising Gasoline Prices: Domestic Resources and Economic Impacts"</i>	March 17, 2011
Senate Energy and Natural Resources Committee <i>Briefing on "Oil Markets and the Impacts of Recent Events in the Middle East and North Africa"</i>	March 15, 2011
House Energy and Commerce Committee, Subcommittee on Energy and Power <i>Hearing on "The Effects of Middle East Events on U.S. Energy Markets"</i>	February 10, 2011
Senate Energy and Natural Resources Committee <i>Hearing on "The Energy and Oil Market Outlook for the 112th Congress"</i>	February 3, 2011
Senate Energy and Natural Resources Committee <i>Hearing on "The Role of Natural Gas in Mitigating Climate Change"</i>	October 28, 2009

RICHARD G. NEWELL (continued)

Senate Energy and Natural Resources Committee
Hearing on "Energy and Related Economic Effects of Global Climate Change Legislation"

October 14, 2009

Senate Energy and Natural Resources Committee
Confirmation hearing

July 9, 2009