

## **RICHARD G. NEWELL**

Resources for the Future  
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*last updated August 2018*

### **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**

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|---------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| President and CEO, Resources for the Future, Washington, DC                                                                                 | 2016–present |
| Adjunct Professor, Nicholas School of the Environment, Duke University, Durham, NC                                                          | 2016–present |
| Administrator, U.S. Energy Information Administration,<br>US Department of Energy, Washington, DC                                           | 2009–2011    |
| Gendell Professor of Energy and Environmental Economics,<br>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,<br>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**

|                                                                                                                      |              |
|----------------------------------------------------------------------------------------------------------------------|--------------|
| Member, Board of Directors, Resources for the Future, Washington, DC                                                 | 2011–present |
| Member, Executive Council, RFF-CMCC European Institute on Economics<br>and the Environment, Milan, Italy             | 2018–present |
| Member, International Advisory Council, King Abdullah Petroleum Studies<br>and Research Center, Riyadh, Saudi Arabia | 2015–present |
| Member, Board on Environmental Change and Society,<br>National Academy of Sciences, Washington, DC                   | 2014–present |
| Member, Cochairs’ Coordinating Committee, National Petroleum Council,<br>US Department of Energy, Washington, DC     | 2016–present |
| Member, Steering Committee, National Petroleum Council,<br>Study on Energy Infrastructure, Washington, DC            | 2018–present |
| Member, American Economics Association                                                                               | 1995–present |

## RICHARD G. NEWELL (continued)

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|-------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Member, Association of Environmental and Resource Economists                                                                        | 1995–present |
| Member, U.S. Association for Energy Economics                                                                                       | 1995–present |
| Member, External Advisory Board, Center for Urban Science and Progress, NYU, NY                                                     | 2015–2018    |
| Member, External Review Committee, Center for Urban Science and Progress, NYU, NY                                                   | 2017         |
| Research Associate, National Bureau of Economic Research                                                                            | 2008–2017    |
| Co-Editor, <i>Review of Environmental Economics and Policy</i>                                                                      | 2013–2017    |
| Associate Editor, <i>Journal of Economic Perspectives</i>                                                                           | 2014–2017    |
| Chair, Committee on Assessing Approaches to Updating the Social Cost of Carbon,<br>National Academy of Sciences, Washington, DC     | 2015–2017    |
| Member, North Carolina Energy Policy Council, Raleigh, NC                                                                           | 2013–2015    |
| 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,<br>National Academy of Sciences, Washington, DC                    | 2013–2015    |
| Member, Study Committee, American Academy of Arts and Sciences<br>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, <i>Review of Environmental Economics and Policy</i>                                                        | 2011–2013    |
| Member, Coordinating Sub-Committee, National Petroleum Council (NPC)<br>Study on the Future of Transportation Fuels, Washington, DC | 2010–2012    |
| Member, Coordinating Sub-Committee, NPC Study on North American Resource<br>Development, Washington, DC                             | 2010–2011    |
| Member, Steering Committee, Quadrennial Energy Technology Review,<br>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    |

## RICHARD G. NEWELL (continued)

### PUBLICATIONS

#### *Journal Articles*

- Newell, R.G., B. Prest, and A. Vissing. In press. Trophy hunting vs. manufacturing energy: The price-responsiveness of shale gas. *Journal of the Association of Environmental and Resources Economists*. Prepublication versions available as [RFF Discussion Paper 16-32](#) and [NBER Working Paper 22532](#).
- Cao, J., M.S. Ho, Yating Li, R.G. Newell, and W.A. Pizer. In press. Chinese residential electricity consumption estimation and forecast using micro-data. *Resource and Energy Economics*. <https://dx.doi.org/10.1016/j.reseneeco.2017.10.003>
- Newell, R.G. and D. Raimi. 2018. The fiscal impacts of increased U.S. oil and gas development on local governments. *Energy Policy* 117:14-24. <https://dx.doi.org/10.1016/j.enpol.2018.02.042> Prepublication versions available as RFF Working Paper
- Newell, R.G. and D. Raimi. 2018. US state and local oil and gas revenue sources and uses. *Energy Policy* 112: 12-18. <http://dx.doi.org/10.1016/j.enpol.2017.10.002> Prepublication version available as [RFF Discussion Paper 16-50](#).
- Bielen, D., R.G. Newell, and W.A. Pizer. 2018. Who did the ethanol tax credit benefit? An event analysis of subsidy incidence. *Journal of Public Economics* 161:1-14. <https://dx.doi.org/10.1016/j.jpubeco.2018.03.005> Prepublication versions available as [RFF Working Paper 18-10-REV](#) and [NBER Working Paper 21968](#).
- Gerarden, T.D., R.G. Newell, and R.N. Stavins. 2017. Assessing the energy-efficiency gap. *Journal of Economic Literature* 55(4):1486–1525. <http://dx.doi.org/10.1257/jel.20161360> Prepublication versions available as [RFF Discussion Paper 15-07](#) and [NBER Working Paper 20904](#).
- Fischer, C., L. Preonis, and R.G. Newell. 2017. *Journal of the Association of Environmental and Resources Economists* 4(4):959-984. <http://dx.doi.org/10.1086/692507> Prepublication version available as [RFF Discussion Paper 13-20](#).
- Huang B., M. Knox, K. Bradbury, L. Collins, and R.G. Newell. 2017. Non-intrusive load monitoring system performance over a range of low frequency sampling rates. *2017 IEEE 6th International Conference on Renewable Energy Research and Applications (ICRERA)*, San Diego, CA, 2017, pp. 505-509. <http://dx.doi.org/10.1109/ICRERA.2017.8191111>
- Bradbury, K., Saboo, R., Johnson, T., Malof, J., Devarajan, A., Zhang, W., Collins, L.M., Newell, R.G. 2016. Distributed solar photovoltaic array location and extent dataset for remote sensing object identification. *Scientific Data* 3: 160106. <http://dx.doi.org/10.1038/sdata.2016.106>
- Malof, J., Bradbury, K., Collins, L., and Newell, R. 2016. Automatic detection of solar photovoltaic arrays in high resolution aerial imagery. *Applied Energy* 183:229-240. <http://dx.doi.org/10.1016/j.apenergy.2016.08.191>
- Malof, J., Serrano, A., Wu, H., Keene, S., Bradbury, K., Collins, L., and Newell, R. 2016. Image features for pixel-wise detection of solar photovoltaic arrays in aerial imagery using a random forest classifier. *2016 IEEE International Conference on Renewable Energy Research and Applications (ICRERA)*, Birmingham, 2016, pp. 799-803. <http://dx.doi.org/10.1109/ICRERA.2016.7884446>
- Malof, J., Bradbury, K., Collins, L., and Newell, R. 2016. A deep convolutional neural networks for solar photovoltaic array detection in aerial imagery. *2016 IEEE International Conference on Renewable Energy Research and Applications (ICRERA)*, Birmingham, 2016, pp. 650-654. <http://dx.doi.org/10.1109/ICRERA.2016.7884415>

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- Newell, R.G. and J. Siikamäki. 2015. Individual time preferences and energy efficiency. *American Economic Review* 105(5): 196-200. <http://dx.doi.org/10.1257/aer.p20151010> Prepublication version available as [NBER Working Paper 20969](#).
- 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. <http://dx.doi.org/10.1257/aer.p20151012>
- Czarnek, N., K. Morton, L. Collins, R. Newell, K. Bradbury. 2015. Performance comparison framework for energy disaggregation systems. *2015 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Miami, 446-452. <http://dx.doi.org/10.1109/SmartGridComm.2015.7436341>
- Malof, J., R. Hou, L. Collins, K. Bradbury, R. Newell. 2015. Automatic Solar Photovoltaic Panel Detection in Satellite Imagery. *2015 International Conference on Renewable Energy Research and Applications (ICRERA)*, Palermo, pp. 1428-1431. <http://dx.doi.org/10.1109/ICRERA.2015.7418643>
- 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. <http://dx.doi.org/10.1126/science.1259774>
- 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. <http://dx.doi.org/10.1086/679281> Prepublication versions available as [RFF Discussion Paper 13-17](#) and [NBER Working Paper 19224](#).
- Newell, R.G. and D. Raimi. 2014. Implications of shale gas development for climate change. *Environmental Science and Technology* 48:8360-8368. <http://dx.doi.org/10.1021/es4046154>
- Newell, R.G., W.A. Pizer, and D. Raimi. 2014. Carbon market lessons and global policy outlook. *Science* 343:1316-1317. <http://dx.doi.org/10.1126/science.1246907>
- Newell, R.G., W.A. Pizer, and D. Raimi. 2014. Carbon markets: Effective policy?—Response. *Science* 344(6191):1460-1461. <http://dx.doi.org/10.1126/science.344.6191.1460-c>
- 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. <http://dx.doi.org/10.1093/reep/reu008>
- Newell, R.G., W.A. Pizer, and D. Raimi. 2014. Carbon markets: past, present, and future. *Annual Review of Resource Economics* 6(1): 191-215. <http://dx.doi.org/10.1146/annurev-resource-100913-012655>
- 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. <http://dx.doi.org/10.1126/science.1235665>
- 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. <http://dx.doi.org/10.1257/jep.27.1.123> Prepublication version available as [NBER Working Paper 18504](#).
- 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 CO<sub>2</sub> in deep-saline aquifers. *Energy Economics* 34(5):1569-1579. <http://dx.doi.org/10.1016/j.eneco.2011.11.015>
- 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. <http://dx.doi.org/10.5547/01956574.33.2.4>

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- 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. <http://dx.doi.org/10.1016/j.eneco.2011.07.001>  
Prepublication version available as [NBER Working Paper 15423](#).
- 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. <http://dx.doi.org/10.1257/jel.48.4.903>  
Prepublication version available as [RFF Discussion Paper 08-16](#) and [NBER Working Paper 15022](#).
- 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. <http://dx.doi.org/10.1093/oxrep/grq009>
- Gillingham, K., R.G. Newell, and K. Palmer. 2009. Energy efficiency economics and policy. *Annual Review of Resource Economics* 1: 597-619. <http://dx.doi.org/10.1146/annurev.resource.102308.124234>  
Prepublication version available as [RFF Discussion Paper 09-13](#) and [NBER Working Paper 15031](#).
- 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. <http://dx.doi.org/10.1093/reep/ren016> Prepublication version available as [RFF Discussion Paper 08-24](#) and [NBER Working Paper 14258](#).
- Eccles, J.K., L. Pratson, R.G. Newell, and R.B. Jackson. 2009. Physical and economic potential of geological CO<sub>2</sub> storage in saline aquifers. *Environmental Science and Technology* 43: 1962-1969. <http://dx.doi.org/10.1021/es801572e>
- 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. <http://dx.doi.org/10.1016/j.reseneeco.2008.09.004> Prepublication version available as [RFF Discussion Paper 05-13](#).
- Newell, R.G. and W.A. Pizer. 2008. Indexed regulation. *Journal of Environmental Economics and Management* 56(3):221-233. <http://dx.doi.org/10.1016/j.jeem.2008.07.001> Prepublication versions available as [RFF Discussion Paper 05-62](#) and [NBER Working Paper 13991](#).
- Gillingham, K., R.G. Newell, and W.A. Pizer. 2008. Modeling endogenous technological change for climate policy analysis. *Energy Economics* 30:2734-2753. <http://dx.doi.org/10.1016/j.eneco.2008.03.001> Prepublication version available as [RFF Discussion Paper 07-14](#).
- Fischer, C. and R.G. Newell. 2008. Environmental and technology policies for climate mitigation. *Journal of Environmental Economics and Management* 55(2):142–162. <http://dx.doi.org/10.1016/j.jeem.2007.11.001> Prepublication version available as [RFF Discussion Paper 04-05](#).
- 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. <http://dx.doi.org/10.1016/j.enpol.2007.09.030> Prepublication version available as [RFF Discussion Paper 06-50](#).
- 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. <http://dx.doi.org/10.1111/j.1467-8276.2007.01018.x>  
Prepublication version available as [RFF Discussion Paper 05-46](#).
- 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*

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- Journal* 27(3):135–168. <http://dx.doi.org/10.2307/23296994> Prepublication version available as [RFF Discussion Paper 05-08](#).
- Gillingham, K., R.G. Newell, and K. Palmer. 2006. Energy efficiency policies: A retrospective examination. *Annual Review of Environment and Resources* 31:161–192. <http://dx.doi.org/10.1146/annurev.energy.31.020105.100157> Prepublication version available as [RFF Discussion Paper 04-19](#).
- Newell, R.G., A.B. Jaffe, and R.N. Stavins. 2006. The effects of economic and policy incentives on carbon mitigation technologies. *Energy Economics* 28(5-6):563–578. <http://dx.doi.org/10.1016/j.eneco.2006.07.004>
- 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. <http://dx.doi.org/10.1016/j.ecolecon.2004.12.027> Prepublication version available as [RFF Discussion Paper 04-38](#).  
(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. <http://dx.doi.org/10.1007/s10640-005-1761-y> Prepublication version available as [RFF Discussion Paper 03-34](#).
- Newell, R.G., J.N. Sanchirico, and S. Kerr. 2005. Fishing quota markets. *Journal of Environmental Economics and Management* 49:437–462. <http://dx.doi.org/10.1016/j.jeem.2004.06.005> Prepublication version available as [RFF Discussion Paper 02-20](#).
- 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. <http://dx.doi.org/10.1111/1467-6451.00203> Prepublication version available as [RFF Discussion Paper 01-14](#).  
(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. <http://dx.doi.org/10.1016/j.reseneeco.2003.07.001> Prepublication versions available as [RFF Working Paper 02-58](#).
- Anderson, S.T. and R.G. Newell. 2004. Prospects for carbon capture and storage technologies. *Annual Review of Environment and Resources* 29:109–142. <http://dx.doi.org/10.1146/annurev.energy.29.082703.145619> Prepublication version available as [RFF Discussion Paper 02-68](#).
- 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. [http://dx.doi.org/10.1016/S0095-0696\(02\)00031-1](http://dx.doi.org/10.1016/S0095-0696(02)00031-1) Prepublication version available as [RFF Discussion Paper 00-45](#).
- Newell, R.G. and W.A. Pizer. 2003. Regulating stock externalities under uncertainty. *Journal of Environmental Economics and Management* 45:416–432. [http://dx.doi.org/10.1016/S0095-0696\(02\)00016-5](http://dx.doi.org/10.1016/S0095-0696(02)00016-5) Prepublication version available as [RFF Discussion Paper 99-10-REV](#).
- 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. <http://dx.doi.org/10.1023/A:1021879330491> Prepublication version available as [RFF Discussion Paper 00-10-REV](#).

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- 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. <http://dx.doi.org/10.1021/es032462t>
- Newell, R.G. and W.A. Pizer. 2003. Uncertain discount rates in climate policy analysis. *Energy Policy* 32(4):519–529. [http://dx.doi.org/10.1016/S0301-4215\(03\)00153-8](http://dx.doi.org/10.1016/S0301-4215(03)00153-8)
- Anderson, S.T. and R.G. Newell. 2003. Simplified marginal effects in discrete choice models. *Economics Letters* 81(3):321–326. [http://dx.doi.org/10.1016/S0165-1765\(03\)00212-X](http://dx.doi.org/10.1016/S0165-1765(03)00212-X) Prepublication version available as [RFF Discussion Paper 03-38](#).
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- 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. <http://dx.doi.org/10.1006/jeem.1999.1120> Prepublication version available as [RFF Discussion Paper 99-31-REV](#).
- 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. <http://dx.doi.org/10.1162/003355399556188> Prepublication versions available as [RFF Discussion Paper 98-12-REV](#) and [NBER Working Paper 6437](#).  
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- 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. <http://dx.doi.org/10.1557/JMR.1989.0434>
- 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. <http://dx.doi.org/10.1557/PROC-141-207>

### **Books and Book Chapters**

- Newell, R.G. 2015. The Role of Energy Technology Policy Alongside Carbon Pricing. In *Implementing a US Carbon Tax*, I. Parry, A. Morris, and R.C. Williams, eds. International Monetary Fund. Washington, DC: Routledge. pp. 178–190.
- 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* (2<sup>nd</sup> 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* (2<sup>nd</sup> ed.), J.H. Kalicki and D.L. Goldwyn, eds. Washington, DC: Johns Hopkins University Press. Prepublication version available as [NBER Working Paper 18967](#).

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- 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. Prepublication version available as [NBER Working Paper 16529](#).
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## 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), American Agricultural Economics Association meetings, Aspen Institute Energy Policy Forum (Aspen), Aspen Institute Global Energy Forum (Aspen), Aspen Institute Forum on Shale Gas (Aspen), Atlantic Council (Washington, DC), 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), Center for Strategic and International studies (Washington, DC), Conference of the Parties to the United Nations Framework Convention on Climate Change (Milan, Bonn, Lima), 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 American Gas Forum (Washington, DC), 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 (Berkeley, Irvine, Los Angeles, 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*

|                                                                                                                                                                                   |                   |
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| Senate Agriculture, Nutrition, and Forestry Committee<br><i>Hearing on "Evaluating High Gas Prices and How New Rules and Innovative Farming Can Help"</i>                         | March 30, 2011    |
| House Natural Resources Committee<br><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<br><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<br><i>Hearing on "The Effects of Middle East Events on U.S. Energy Markets"</i>                             | February 10, 2011 |
| Senate Energy and Natural Resources Committee<br><i>Hearing on "The Energy and Oil Market Outlook for the 112th Congress"</i>                                                     | February 3, 2011  |

**RICHARD G. NEWELL** (continued)

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| Senate Energy and Natural Resources Committee<br><i>Hearing on "The Role of Natural Gas in Mitigating Climate Change"</i>                     | October 28, 2009 |
| Senate Energy and Natural Resources Committee<br><i>Hearing on "Energy and Related Economic Effects of Global Climate Change Legislation"</i> | October 14, 2009 |
| Senate Energy and Natural Resources Committee<br><i>Confirmation hearing</i>                                                                  | July 9, 2009     |