

# RICHARD G. NEWELL

[richardgnewell@gmail.com](mailto:richardgnewell@gmail.com) • +1-202-706-3050 • Washington, DC, USA 20036

## LEADERSHIP EXPERIENCE

One of the world's top environmental and energy economists, a widely trusted thought leader and strategic thinker on public and private sector decision making on climate change, the energy transition, and technology innovation. Innovation-oriented organizational leadership, financial and people management, fundraising, and communication experience in roles spanning multiple sectors and ranging from start-ups to longstanding institutions. Collaborator across a variety of constituencies, working at the highest levels of decision making in the United States and internationally with diverse private, governmental, non-governmental, and international organizations.

### President and CEO

#### Resources for the Future (RFF), Washington, DC

2016–present

- Substantially increased the impact, visibility and public profile, and institutional sustainability of the world's leading think tank focused on environmental and energy economics and policy.
- Drove an increased focus of RFF's work principally around decisions helping to solve the climate crisis and build a net-zero emissions, resilient economy.
- Forged and executed the most significant transformation of RFF in four decades, based on a comprehensive strategic framework and theory of impact formulated to substantially increase the intentionality of RFF's approach to research, policy engagement, fundraising, and strategic communications.
- Established RFF's commitment to Diversity, Equity, and Inclusion (DEI) and launched RFF's DEI action plan, Environmental Justice Initiative, and Equity in the Energy Transition Initiative. Substantially increased the diversity of RFF's staff, Board, and partners, as well as RFF's research and policy engagement on equity-related issues.
- Expanded RFF's access, influence, and financial resources by establishing a President's Council of major individual donors, a Business Leadership Council to underpin corporate relationships, a government affairs team to support congressional and executive branch relationships, and the European Institute of Economics and the Environment and Global Climate Policy Partnership to expand RFF's international reach.
- Moved RFF's finances from deficit to growth, successfully overseeing its investments, building, and associated debt.
- To achieve RFF's mission-driven strategic goals, instituted a system of Objectives and Key Results (OKRs) to track measurable progress on concrete actions.
- Successfully navigated RFF through both the COVID-19 crisis and a major cybersecurity incident, emerging as a more flexible, connected, and resilient institution.
- As an Executive Committee member, guided RFF's Board through its first self-assessment process, resulting in an action plan that implemented best practices across all board functions, including increased board diversity, adoption of ESG principles for investments, and a comprehensive enterprise risk management approach.
- Serve as a member of the National Academy of Sciences (NAS) Climate Security Roundtable. Chaired a formative NAS study on the social cost of carbon, and based on its recommendations launched an RFF initiative that has resulted in a major update to official US estimates of the benefits of reducing greenhouse gas emissions.

### Founding Director

#### Duke University Energy Initiative, Duke University, Durham, NC

2011–2016

- As the Founding Director of the Duke University Energy Initiative, turned what was just a concept in 2011 into one of Duke's signature interdisciplinary institutes focused on climate and energy.
- Developed and executed the Initiative's vision, mission, and strategic implementation plan, working with a dedicated staff, the provost and vice-provosts, deans and faculty of 6 schools, 8 other interdisciplinary institutes, university development staff, Board of Trustees members, alumni, students, and eternal partners.
- As an appointee of the US Secretary of Energy to the National Petroleum Council, advised on issues ranging from the future of transportation to hydrogen, carbon capture and storage, energy infrastructure, natural gas development, and associated greenhouse gas emissions.

## **RICHARD G. NEWELL (continued)**

- Oversaw staff, budget, external and internal advisory committees, external relations and fundraising, internal faculty governance, faculty recruitment and retention, and education, research, and engagement programs.
- Founded and directed the Energy Data Analytics Lab, which creates groundbreaking energy applications of machine learning and visual object identification techniques using satellite data.
- Developed fundraising opportunities in collaboration with university leadership and development staff to support energy and environment as an element of the \$3.9 billion “Duke Forward” fundraising campaign. Highlighted energy as a signature element of the campaign, identifying fundraising priorities, creating development materials, and designing fundraising events. Spearheaded numerous development events and individual meetings with individual, foundation, and corporate donors from diverse backgrounds and perspectives.

### **Administrator**

#### **US Energy Information Administration, US Department of Energy, Washington, DC      2009–2011**

- As the Senate-confirmed, presidentially appointed leader of the agency for official US energy statistics and analysis, led a staff of 5 senior executives, 400 federal employees, and more than 200 contractors, with an annual budget of about \$135 million. Worked with the US Secretary of Energy as a member of DOE’s senior leadership team.
- Participated in numerous departmental and interagency policy processes, briefings with the US President and Cabinet Secretaries, bilateral and multilateral international meetings, testimony before Congressional committees and briefings for members and staff, collaborations with corporate and NGO leaders at the CEO level. Key topics ranged from carbon cap-and-trade systems, clean energy standards, renewable energy innovation, and the social cost of carbon, to the shale gas and tight oil revolutions, oil price volatility, and strategic petroleum reserves.
- Planned, received approval for, and implemented the first major reorganization of EIA in more than 30 years, with broad support from the senior federal career managers and staff of professional engineers, economists, statisticians, operations researchers, and communications and financial experts.
- Formulated and led a substantial overhaul of EIA’s strategic plan and communications efforts, including its website ([www.eia.gov](http://www.eia.gov)) and product line.
- Reformed EIA’s budget process and managed EIA’s budget through a time of significant federal budget cuts, while maintaining core functions and key initiatives at high quality and at the same time undertaking major innovations that continue to have impact today. Advocated for EIA’s budget—within the Department of Energy, with the White House Office of Management and Budget, and with Congressional appropriations members/staff.

### **OTHER PROFESSIONAL EXPERIENCE**

Gendell Professor of Energy & Environmental Economics, Nicholas Sch. of Env., Duke U., Durham, NC	2007–2016
Professor of Economics, Department of Economics, Duke University, Durham, NC	2011–2016
Professor of Public Policy, Sanford School of Public Policy, Duke University, Durham, NC	2013–2016
Senior Economist for Energy and Environment, President’s Council of Economic Advisers, Wash., 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

### **EDUCATION**

Ph.D., Harvard University, Public Policy (Environmental and Resource Economics)	1997
M.P.A., Princeton University, School of Public and International Affairs, 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

## RICHARD G. NEWELL (continued)

### PROFESSIONAL AFFILIATIONS

Member, Board of Directors, Euro-Mediterranean Center on Climate Change (CMCC), Lecce, Italy	2023–present
Member, Climate Security Roundtable, National Academy of Sciences (NAS), Washington, DC	2022–present
Member, Advisory Board, Carbon Barometer, Kepos Capital, NY	2020–present
Member, Executive Council, RFF-CMCC European Inst. on Economics and Environment, Milan, Italy	2018–present
Adjunct Professor, Nicholas School of the Environment, Duke University, Durham, NC	2016–present
Member, National Petroleum Council (NPC), US Department of Energy, Washington, DC	2016–present
Member, Board of Directors, Resources for the Future, Washington, DC	2011–present
Member, American Economic Association	1995–present
Member, Association of Environmental and Resource Economists	1995–present
Member, International Association for Energy Economics	1995–present
Member, Steering Committee, NPC Study on Hydrogen Energy	2022–present
Member, Steering Committee, NPC Study on GHG Emissions	2022–present
Member, Board on Environmental Change and Society, NAS	2014–2022
Member, Steering Committee, NPC Study on Carbon Capture and Storage	2019–2020
Member, Steering Committee, NPC Study on Energy Infrastructure	2018–2020
Member, International Advisory Council, KAPSARC, Riyadh, Saudi Arabia	2015–2019
Member, Co-chairs' Coordinating Committee, NPC	2016–2018
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, Cambridge, MA	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 Approaches to Updating the Social Cost of Carbon, NAS	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	2013–2015
Member, Policy Roundtable of the Behavioral and Social Sciences, NAS	2013–2015
Member, Study Committee on the Alternative Energy Future, American Academy of Arts and Sciences	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, NPC Study on the Future of Transportation Fuels	2010–2012
Member, Coordinating Sub-Committee, NPC Study on North American Resource Development	2010–2011
Member, Steering Committee, Quadrennial Energy Technology Review, US Department of Energy	2010–2011
Committee on Energy Externalities, NAS	2008–2009
Board Member, Association of Environmental and Resource Economists	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, NAS	2008
Committee on Energy Efficiency Standards, NAS	2007–2009
Committee on Geopolitics and Policy, NPC Global Oil & Gas Study	2006–2007
Committee on NSF Innovation Inducement Prizes, NAS	2006–2007
Committee on the Benefits of Energy R&D, NAS	2005–2007

## RICHARD G. NEWELL (continued)

### PUBLICATIONS

#### *Journal Articles*

- Newell, R.G., W.A. Pizer, and B.C. Prest. 2023. The shadow price of capital: Accounting for capital displacement in benefit–cost analysis. *Environmental and Energy Policy and the Economy*, volume 5. National Bureau of Economic Research. Prepublication version available as [RFF Working Paper 23-07](#).
- Rennert, K., Errickson, F., Prest, B.C., Rennels, L., Newell, R.G., Pizer, W., Kingdon, C., Wingenroth, J., Cooke, R., Parthum, B., Smith, D., Cromar, K., Diaz, D., Moore, F.C., Müller, U.K., Plevin, R.J., Raftery, A.E., Ševčíková, H., Sheets, H., Stock, J.H., Tan, T., Watson, M., Wong, T.E., Anthoff, D. 2022. Comprehensive evidence implies a higher social cost of CO<sub>2</sub>. *Nature* 610:687–692 <https://doi.org/10.1038/s41586-022-05224-9>.
- Rennert, K., B.C. Prest, W.A. Pizer, R.G. Newell, D. Anthoff, C. Kingdon, L. Rennels, R. Cooke, A.E. Raftery, H. Ševčíková, and F. Errickson. 2022. The social cost of carbon: Advances in long-term probabilistic projections of population, GDP, emissions, and discount rates. *Brookings Papers on Economic Activity* Fall 2021:223–275. <https://doi.org/10.1353/eca.2022.0003>. Prepublication version available as [RFF Working Paper 21-28](#).
- Newell, R.G., W.A. Pizer, and B.C. Prest. 2022. A discounting rule for the social cost of carbon. *Journal of the Association of Environmental and Resource Economists* 9(5):1017–1046. <https://doi.org/10.1086/718145>. Prepublication version available as [RFF Working Paper](#).
- Newell, R.G., B.C. Prest, and S.E. Sexton. 2021. The GDP-temperature relationship: Implications for climate change damages. *Journal of Environmental Economics and Management* 108:1–26. <https://doi.org/10.1016/j.jeem.2021.102445>. Prepublication version available as [RFF Working Paper 18-17](#).
- Newell, R.G., W.A. Pizer, and D. Raimi. 2019. U.S. federal government subsidies for clean energy: Design choices and implications. *Energy Economics* 80:831–841. <https://doi.org/10.1016/j.eneco.2019.02.018>.
- Newell, R.G. and B.C. Prest. 2019. The unconventional oil supply boom: Aggregate price response from microdata. *The Energy Journal* 40(3):1–30. <https://doi.org/10.5547/01956574.40.3.rnew>. Prepublication versions available as [RFF Working Paper 17-15](#) and [NBER Working Paper 23973](#).
- Cao, J., M.S. Ho, Yating Li, R.G. Newell, and W.A. Pizer. 2019. Chinese residential electricity consumption estimation and forecast using micro-data. *Resource and Energy Economics* 56:6–27. <https://dx.doi.org/10.1016/j.reseneeco.2017.10.003>
- Newell, R.G., B. Prest, and A. Vissing. 2019. Trophy hunting vs. manufacturing energy: The price-responsiveness of shale gas. *Journal of the Association of Environmental and Resources Economists* 6(2):177–217. <https://doi.org/10.1086/701531>. Prepublication versions available as [RFF Discussion Paper 16-32](#) and [NBER Working Paper 22532](#).
- 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>
- 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. Environmental and Technology Policy Options in the Electricity Sector: Are We Deploying Too Many? *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>

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- 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>
- 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., Pizer, W.A., and Raimi, D. 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>



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- 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> Prepublication version available as [RFF Discussion Paper 09-48](#) and [NBER Working Paper 17556](#).
- 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 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](#).
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- 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](#).
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- 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](#).
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- Newell, R.G. and B.C. Prest. 2017. Informing SPR policy through oil futures and inventory dynamics. [RFF Working Paper 17-19](#). [NBER Working Paper 23974](#).
- Bradbury, K., M. Knox, L. Collins, and R.G. Newell. 2016. Generating synthetic device-level electricity consumption data. Duke University, Durham, NC.
- Lin, M., K. Bradbury, and R.G. Newell. 2016. Energy saving control strategies for conventional domestic water heaters.
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## **RICHARD G. NEWELL (continued)**

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.

### **PROFESSIONAL ACTIVITIES**

#### ***Awards***

2018 USAEE Adelman-Frankel Award, from the U.S. Association for Energy Economics, for unique and innovative contributions to the field of energy economics.

2017 Publication of Enduring Quality Award, from the Association of Environmental and Resource Economists, for “The Induced Innovation Hypothesis and Energy-Saving Technological Change”, published in the *Quarterly Journal of Economics* in 2002.

2006 Petry Research Prize for the Economics of Climate Change, from the Association of Environmental and Resource Economists, for “Discounting the Distant Future: How Much Do Uncertainty Rates Increase Valuations?”, published in the *Journal of Environmental Economics and Management* in 2003.

#### ***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.

#### ***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), Danish Conference on Environmental Economics (Copenhagen), 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 Energy Workshop, International Institute for Applied Systems Analysis (Laxenburg), Institute for Global Environmental Strategies (Tokyo), Global Industrial and Social Progress Research Institute (Tokyo), International Association for Energy Economics, 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

## RICHARD G. NEWELL (continued)

Triangle Energy Consortium, RFF, Shanghai Forum (Shanghai), Stanford University, Swedish Foundation for Strategic Environmental Research (Stockholm), T20 Inception Conference (Riyadh), 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*

Senate Energy and Natural Resources Committee <i>Hearing on "Examine Global Climate Trends and Progress in Addressing Climate Change"</i>	February 3, 2021
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
Senate Energy and Natural Resources Committee <i>Hearing on "Energy and Related Economic Effects of Global Climate Change Legislation"</i>	October 14, 2009
Senate Energy and Natural Resources Committee <i>Confirmation hearing</i>	July 9, 2009