# LAURA DIAZ ANADON – CURRICULUM VITÆ

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## **EDUCATION**

2007-2010 Harvard University, John F. Kennedy School of Government, Cambridge, MA, USA

> Masters in Public Policy, concentrations in International and Global Affairs and Science, Technology and Public Policy.

2003-2006 Cambridge University, Department of Chemical Engineering, Cambridge, UK

Ph.D. in Chemical Engineering (Queens' College)

Thesis title: "Transient hydrodynamics and reaction in trickle-bed reactors using NMR and MRI" Supervisor: Prof. Lynn F. Gladden, FRS. External examiners: Prof. Dieter Mewes and Prof. Bill Patterson

University of Manchester, Department of Chemical Engineering, Manchester, UK 1999-2003

> M.Eng. 1st Class Honours – Chemical Engineering with German (Integrated Bachelors & Masters degree) Reynolds Prize for "Best Graduate of 2003"

University of Stuttgart, Department of Process Engineering, Stuttgart, Germany 2001-2002 'Diplomarbeit' (final dissertation in German engineering schools) and 12 exams

# ACADEMIC EXPERIENCE

Sept 2016-University of Cambridge, Department of Politics and International Studies, Cambridge, UK

> University Lecturer (Assistant Professor) in Public Policy Bye-Fellow at Peterhouse, University of Cambridge

Fellow in the Center for Environment, Energy and Natural Resource Governance (C-EENRG)

Associate Researcher in the Energy Policy Research Group

July 2015-University College London (UCL), Department of Science, Technology, Engineering and Public Policy

Aug 2016 (STEaPP), London, United Kingdom

Visting Senior Lecturer in Science, Technology, Innovation and Public Policy

Honorary faculty in the Department of Chemical Engineering, University College London

Harvard University, John F. Kennedy School of Government (HKS), Cambridge, MA, USA May 2008-

Research Associate of the Belfer Center for Science & International Affairs, September 2016-

Assistant Professor of Public Policy, July 2013-August 2016

Faculty Associate, Harvard University Center for the Environment (HUCE), July 2013-August 2016 Faculty Associate, Weatherhead Center for International Affairs, September 2013-August 2016 Co-Principal Investigator, Energy Technology Innovation Policy (ETIP) group, July 2013-July 2015 Associate Director, Science, Technology and Public Policy program, July 2013-July 2015 Member of the Board, Belfer Center for Science and International Affairs, June 2013-July 2015 Associate Director, Science Technology and Public Policy (STPP) program, June 2010-July 2015 Adjunct Lecturer in Public Policy, June 2011-June 2013

Director, Energy Technology Innovation Policy (ETIP) research group, June 2010-June 2013 Project Manager, Energy Research, Development & Demonstration Policy project, May 2008-2011

### **PROFESSIONAL EXPERIENCE**

September Innovation Caucus, UK

2017 Selected as Member of this partnership of experts organized by the UK ESRC and Innovate UK to

support the UK innovation ecosystem (in my case in the area of energy and the environment)

2014-2015 Organization for Economic Cooperation and Development (OECD), Paris, France

Consultant on project on using technical insights from energy expert elicitations for energy policy

2010 Climate Strategies UK, Cambridge, UK (NGO)

Consultant for a World Bank InfoDev Project

Wrote case study on UNIDO's Cleaner Production Centers regarding their applicability to the design of Climate Innovation Centers to overcome barriers to energy technology innovation in developing countries.

2009 United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, Bonn, Germany

Co-authored a background paper with Prof. Ambuj Sagar (IIT Delhi) for the UNFCCC's Expert Group on

Technology Transfer on the role of intellectual property rights on technology transfer for climate mitigation.

2007 Oliver Wyman Financial Services, London, UK

Consultant on financing of technology projects

2003-2006 Johnson Matthey Catalyst Technologies, Cambridge, UK

Process Technology Researcher (part-time)

2001 **DuPont, Environmental Technology and Management Section**, Asturias, Spain

Summer Sontara® Fiber Plant Researcher

2000 Bayer Pharmaceuticals, R&D and Quality Control Departments, Asturias, Spain

Summer Researcher

## SELECTED SCHOLARSHIPS AND FELLOWSHIPS

### Graduate

- Harvard-Real Colegio Complutense Scholarship, 2007-2009
- Fundación Caja Madrid Fellowship, 2007
- US-UK Fulbright Commission Scholarship, 2006 (declined)
- European Federation of Chemical Engineering Student Award, 2005
- Britain's Top Younger Engineers Award at the House of Commons, RWE npower Section Award, 2005 (SET for Britain, now STEM for Britain)
- Cambridge European Trust Scholar and Isaac Newton Scholar, 2003-2006
- UK Engineering and Physical Science Research Council Scholarship, 2003-2006

# Undergraduate

- Reynolds Prize for "Best Graduate of 2003" (out of 1,700 students)
- Best Final Year Design Project Award, Dept. of Chemical Engineering, UMIST
- Erasmus European Scholarship
- Shell Environmental Fellowship

### PEER-REVIEWED PUBLICATIONS

#### Climate, Energy and Innovation Policy

- 1. **Anadon, LD,** Baker, ED, Bosetti, V. "Integrating uncertainty into public energy research and development decisions." *Nature Energy* 2, 17071 (2017) doi:10.1038/nenergy.2017.71. (All authors contributed equally).
- Siddiqi, A, Stoppani, J, Anadon, LD, Narayanamurti, V. "Scientific Wealth in Middle East and North Africa: <u>Productivity, Indigeneity, and Specialty in 1981-2013</u>". PLoSONE (Public Library of Science ONE). 11(11): e0164500. doi:10.1371/journal.pone.0164500 (2016).

- 3. **Anadon, LD,** Chan, G, Harley, A, Matus, K, Moon, S, Murthy, S, Clark, W. 'Making Innovation Work for Sustainable Development'. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. vol. 113 no. 35, 9682–9690 (2016). (First three authors share co-first-authorship).
- 4. **Anadon, LD**, Chan, G, Bin-Nun, A, Narayanamurti, V. 'The pressing energy innovation challenge of the U.S. national labs.' *Nature Energy* 1, 16117 (2016) doi:10.1038/nenergy.2016.117
- 5. Siddiqi, A, Ereiqat, F, Anadon, LD. 'Formulating expectations for future water availability through infrastructure development decisions in arid regions.' Systems Engineering 10.1002/sys.21337 (2016).
- 6. Nemet, GF, **Anadon**, **LD**, Verdolini, E. 'Quantifying the effects of expert selection and elicitation design on experts' confidence in their judgments about future energy technologies.' *Risk Analysis* (2016), DOI: 10.1111/risa.12604. In press. (All authors contributed equally).
- 7. **Anadon, LD**, Baker, ED, Bosetti, V, Reis, L. 'Expert views and disagreements about the potential of energy technology R&D.' Climatic Change 136(3): 677-691 (2016).
- 8. Santen, NR, Anadon, LD. 'Balancing solar PV deployment and RD&D: A comprehensive framework for managing innovation uncertainty in electricity technology investment planning.' Renewable and Sustainable Energy Reviews 60 (2016), pp. 560-569.
- 9. Liu, Z, Davis, SJ, Feng, K, Hubacek, K, Liang, S, Anadon, LD, Chen, B, Liu, J, Yan, J, Guan, D. '<u>Targeted opportunities to address the climate-trade dilemma in China</u>.' *Nature Climate Change* 6(2016); 201-206.
- 10. Surana, K, Anadon, LD. 'Public Policy and Financial Resource Mobilization in Developing Countries: a Comparison of Approaches and Outcomes in China and India.' Global Environmental Change 34(2015); 340-359.
- 11. Grindle, AK, Siddiqi, A, **Anadon, LD.** 'Food security amidst water scarcity: insights on sustainable food production from Saudi Arabia.' Sustainable Production and Consumption 2(2015), pp. 67-78.
- 12. Liu, Z, Feng, K, Hubacek, K, Liang, S, **Anadon, LD**, Zhang, C, Guan, D. 'Four system boundaries for carbon accounts.' *Ecological Modelling*, 318:118-125 (2015).
- 13. Guo, Y, Ru, P, Jun, S, Anadon, LD. 'Not in My Backyard, but Not Far away from Me: Local Acceptance of Wind Power in China.' Energy, 82 (2015), pp. 722-733.
- 14. Baker, E, Bosetti, V, Anadon, LD. 'Energy Policy Special Issue on Defining Robust Energy R&D Portfolios.' Energy Policy, 80 (2015), pp. 215-218. (Editorial article, equal contributions of authors).
- Bosetti, V, Marangoni, G, Borgonovo, E, Anadon, LD, Barron, R, C. McJeon, WC, Politis, S, Friley, P.
   <u>Sensitivity to Energy Technology Costs: A Multi-model comparison analysis</u>. *Energy Policy* 80 (2015), pp. 244-263.
- 16. Verdolini, E, **Anadon, LD**, Lu, J, Nemet, GF. 'The effects of expert selection, elicitation design and R&D assumptions on experts' estimates of the future costs of photovoltaics.' *Energy Policy* 80 (2015), pp. 233-243.
- 17. Baker, ED, Bosetti, V, **Anadon, LD,** Henrion, M, Reis, LA. 'Future costs of key low-carbon energy technologies: Harmonization and aggregation of energy technology expert elicitation data.' Energy Policy 80 (2015), pp. 219-232
- 18. Zhang, C, **Anadon, LD**, Mo, H, Zhao, Z, Liu, Z. '<u>The water-carbon tradeoff of China's coal power industry</u>.' *Environmental Science & Technology* 48(19) (2014), pp. 11082-11089.
- 19. Hajjar, DP, Moran, GW, Siddiqi, A, Richardson, JE, **Anadon, LD**, Narayanamurti, V. 'Prospects for policy advances in science and technology in the Gulf Arab States: the role of international partnerships.' *International Journal of Higher Education* 3(3) (2014), pp. 45-57.
- 20. Logar, N, Anadon, LD, Narayanamurti, V. 'Semiconductor Research Corporation: An Industry Collaborative for Mission-Oriented Research.' *Minerva* 52(2) (2014), pp. 237-261.
- 21. Choi, H, Anadon, LD. 'The role of the complementary sector and its relationship with network formation and government policies in emerging sectors: The case of solar photovoltaics between 2001 and 2009.' Technological Forecasting and Social Change, 82 (2014), pp. 80-94.
- 22. Zhang, C, **Anadon**, **LD**. (2014) 'A multi-regional input-output analysis of domestic virtual water trade and provincial water footprint in China.' *Ecological Economics*, 100 (2014), pp.159-172.
- 23. Zhang, C, Anadon, LD. 'Life cycle water use of energy production and its environmental impacts in China.' Environmental Science & Technology. 24(47) (2013), pp. 14459-14467.
- Jordaan, SM, Anadon, LD, Mielke, E, Schrag, DP. 'Regional water- and land-use implications of reducing oil imports with natural gas, shale oil, or biofuels in the United States.' Environmental Science & Technology 47(21) (2013), pp. 11976-11984. (Awarded Best Technical Paper at the Canadian Renewable Fuels Summit).
- 25. **Anadon, LD**, Nemet, GF, Verdolini, E. 'The future costs of nuclear power using multiple expert elicitations: effects of RD&D and elicitation design.' Environmental Research Letters 8 (2013), pp. 034020. (Selected to appear in the monthly highlights collection and topic of an ERL journal Perspective)

- 26. Zhi, Q, Jun, S, Ru, P, **Anadon, LD.** 'The evolution of China's national energy RD&D programs: The role of scientists in science and technology decision-making.' *Energy Policy* 61 (2013), pp. 1568-1585.
- 27. Kajenthira, A, Siddiqi, A, **Anadon, LD**. 'Bridging decision networks for integrated water and energy planning..' In press, *Energy Strategy* Reviews 2(1) (2013), pp. 46-58. (Energy Strategy Reviews: 4<sup>th</sup> of 25 Hottest Articles).
- 28. **Anadon, LD,** Bosetti, V, Bunn, M, Lee, A. 'Expert judgments about RD&D and the future of nuclear energy.' Environmental Science & Technology 41(21) (2012), pp. 11497-11504.
- 29. **Anadon, LD.** 'Missions-oriented RD&D institutions in energy: a comparative analysis of China, the United Kingdom, and the United States.' Research Policy 41(10) (2012), pp. 1742-1756.
- 30. Kajenthira, A, Siddiqi, A, Anadon, LD. 'The Case for Cross-Sectoral Water Reuse in Saudi Arabia: Bringing Energy into the Water Equation.' Journal of Environmental Management 102 (2012), pp. 184-192.
- 31. Qiu, Y, Anadon, LD. 'The price of wind power in China during its expansion: Technology adoption, learning-by-doing, economies of scale, and manufacturing localization.' Energy Economics 34(3) (2012), pp. 772-785.
- 32. Siddiqi, A, Anadon, LD. 'The Water-Energy Nexus in Middle East and North Africa.' Energy Policy 39(6) (2011), pp. 4529-4540.
- 33. Anadon, LD, and Nemet, GF. 'Case study on the U.S. Synthetic Fuels Program: policy consistency, flexibility, and the long-term consequences of perceived failures.' Global Energy Assessment. Coordinated by IIASA. Cambridge University Press. June (2012).
- 34. Kempener, RK, and **Anadon, LD. 'Case study on Energy RD&D investments in the United States and major** emerging economies'. Global Energy Assessment. Coordinated by IIASA. Cambridge University Press. June (2012).
- 35. Sutherland, WJ, Bellingan, L, Bellingham, JR, Blackstock, JJ, Bloomfield, RM, Bravo, M, Cadman, VM, Cleevely, DD, Clements, A, Cohen, AS, Cope, DR, Daemmrich, AA, Devecchi, C, Anadon, LD, Denegri, S, Doubleday, R, Dusic, NR, Evans, RJ, Feng, WY, Godfray, HCJ, Harris, P, Hartley, SE, Hester, AJ, Holmes, J, Hughes, A, Hulme, M, Irwin, C, Jennings, RC, Kass, GS, Littlejohns, P, Marteau, TM, McKee, G, Millstone, EP, Nuttall, WJ, Owens, S, Parker, MM, Pearson, S, Petts, J, Ploszek, R, Pullin, AS, Reid, G, Richards, KS, Robinson, JG, Shaxson, L, Sierra, L, Smith, BG, Spiegelhalter, DJ, Stilgoe, J, Stirling, A, Tyler, CP, Winickoff, DE, Zimmern, RL. 'A collaboratively-derived science-policy research agenda.' PLoSONE (Public Library of Science ONE), 7(3): e31824. doi:10.1371/journal.pone.0031824. (2012).
- 36. Gallagher, KS, **Anadon**, **LD**, Kempener, R, Wilson, C. '<u>Trends in Global Energy-Technology Innovation</u>'. *Wiley Interdisciplinary Reviews Climate Change* 2, Issue 3 (2011), pp. 372-396.
- 37. Chan, G, **Anadon**, **LD**, Chan, M, Lee, A. 'Expert Elicitation of Cost, Performance, and RD&D Budgets for Coal Power with CCS.' Energy Procedia 4 (2011), pp. 2685-2692.
- 38. Narayanamurti, V, **Anadon, LD**, and Sagar, AD. 'Institutions for Energy Innovation: A Transformational Challenge.' Issues in Science & Technology, September (2009), pp. 57-64. U.S. National Academies.

### Multiphase Flow and MRI

- 39. Dietrich, W, **Anadon, LD**, Sederman, AJ, Gladden, LF, Agar, D. 'Simulation studies on the performance enhancement in periodically operated trickle-bed reactors based on experimental local liquid distribution measurements.' *Industrial & Engineering Chemistry Research* 51 (2012), 1672-1679.
- 40. **Anadon, LD**, Sederman, AJ, Gladden, LF. 'Rationalising MRI, conductance and pressure drop measurements of the trickle-to-pulse transition in trickle beds.' Chemical Engineering Science 63 (2008), 4640-4648.
- 41. Gladden, LF, **Anadon, LD**, Dunckley, CP, Mantle, MD, and Sederman, AJ. 'Insights into gas-liquid-solid reactors obtained by magnetic resonance imaging.' *Chemical Engineering Science* 62 (2007), 6969-6977.
- 42. **Anadon, LD**, Sederman, AJ, Gladden, LF. 'The Mechanism of the Trickle-to-Pulse Transition in Fixed-Bed Reactors.' American Institution of Chemical Engineers Journal 52 (2006), 1522-1532.
- 43. Gladden, LF, Akpa, BS, **Anadon, LD**, Heras, JJ, Holland, DJ, Mantle, MD, Matthews, S, Mueller, C, Sains, MC, Sederman, AJ. 'Dynamic MR imaging of single- and two-phase flows.' Chemical Engineering Research & Design 84(A4) (2006), 272-28.
- 44. Gladden, LF, **Anadon**, **LD**, Lim, MHM, Sederman, AJ, and Stitt, EH. 'Insights into the Mechanism of the Trickleto-Pulse Transition in Trickle-Bed Reactors.' *Industrial & Engineering Chemistry Research* 44 (2005), 6320-6331.
- 45. **Anadon, LD**, Lim, MHM, Sederman, AJ, Gladden, AF. 'Hydrodynamics in two-phase flow within porous media.' *Magnetic Resonance Imaging* 23 (2005) 291-294.

- 46. Sederman, AJ, **Anadon, LD**, El-Bachir, MS, Lim, MHM, Mantle, MD, Sains, MC, and Gladden, LF. '<u>Latest developments in dynamic MRI of multi-phase systems</u>.' 4th World Congress on Industrial Process Tomography, Aizu, Japan (2005). Conference Proceedings.
- 47. Cilliers, JJ, Anadon, LD, Wee, FS. 'Temperature, classification and dewatering in 10 mm hydrocyclones.' *Minerals Engineering* 17 (2004) 591-597.

### **BOOKS AND BOOK CHAPTERS**

- 1. <u>BOOK</u>: Siddiqi, A, **Anadon, LD** (Editors). 'Science and Technology Development in the Gulf States: Economic Diversification through Regional Collaboration.' Gerlach Press, Germany, Berlin. 2017. Also author of two chapters:
  - Chapter 1: Siddiqi, A, **Anadon, LD**. 'Scientific Wealth and Technical Capacity in the GCC: International Collaborations to Achieve New National Visions', introductory chapter by editors.
  - Chapter 2: Siddiqi, A, Anadon, LD. 'Science and Engineering Research Collaborations: Patterns of Integration and Extension in the GCC.'
- 2. <u>BOOK</u>: **Anadon**, **LD**, Bunn, M, Narayanamurti, V. (Editors). '<u>Transforming U.S. Energy Innovation</u>'. *Cambridge University Press*, Cambridge, United Kingdom (2014). ISBN-13: 9781107043718.
  - Book reviewed in Science and Public Policy, (2016), 1-2, doi: 10.1093/scipol/scw010
  - Also first author of two chapters and co-author in 4 chapters:
  - Chapter 1: Bunn, M, Anadon, LD, Narayanamurti, V. 'The need to transform US energy innovation.'
  - Chapter 2: **Anadon, LD,** Chan, G, Lee, A. 'Expanding, and improving targeting of, U.S. investment in energy innovation: an analytical approach.
  - Chapter 3: Logar, N, Anadon, LD, Narayanamurti, V. 'Maximizing the return on investment'
  - Chapter 4: Jones, C, **Anadon, LD,** Narayanamurti, V. 'Encouraging private-sector energy technology innovation and public-private cooperation.'
  - Chapter 5: Kempener, K, Bunn, M, Anadon, LD. 'Maximizing the benefit from international energy innovation cooperation.'
  - Chapter 6: **Anadon**, LD, Narayanamurti, V, Bunn, V. 'Transforming US energy innovation: how do we get there?'
- 3. BOOK CHAPTER: Siddiqi, A, **Anadon, LD**, Narayanamurti, V. 'Science and Engineering Education in the GCC: Challenges in the Road for Transformation'. In 'Higher education investment in the Arab States of the Gulf: Strategies for Excellence and Diversity'. Eds. Dale Eickelman and Rogaia Mustafa Abusharaf. *Gerlach Press*, Berlin, Germany. 2017.
- 4. BOOK CHAPTER: **Anadon, LD**, Nemet, GF. 'The U.S. Synthetic Fuels Program: Policy consistency, flexibility, and the long-term consequences of perceived failures.' In "Energy Technology Innovation: Learning from Success and Failure." Edited by A Grübler and C Wilson. In *Cambridge University Press*, Cambridge, United Kingdom (2013), pp. 257-274
- 5. BOOK CHAPTER: Grübler, A, **Anadon, LD**, Gallagher, KS, Kempener, R, O'Rourke, Anastasia, Wilson, C. 'Global R&D, market formation, and diffusion investments in energy technology innovation.' In "Energy Technology Innovation: Learning from Success and Failure." Edited by A Grübler and C Wilson. *Cambridge University Press*, Cambridge, United Kingdome (2013), pp. 292-308.
- 6. BOOK CHAPTER: Kempener, R, **Anadon, LD**, Gallagher, KS, Jiang, K. 'Energy RD&D Investments in the major emerging economies and the United States' In "Energy Technology Innovation: Learning from Success and Failure." Edited by A Grübler and C Wilson. *Cambridge University Press*, Cambridge, United Kingdom (2013), pp. 309-331.
- 7. BOOK CHAPTER: **Anadon, LD**, and Holdren, JP. 'Policy for Energy-Technology Innovation.' In "Acting in Time on Energy Policy." Edited by KS Gallagher. (2009). *Brookings Institution Press*.
- 8. BOOK CHAPTER: Gladden, LF, Akpa, BS, **Anadon, LD**, Dunckley, CP, Lim, MHM, Mantle, MD, and Sederman, AJ. 'Magnetic Resonance Imaging: A new window on the catalyst operating in the reactor environment.' *Turning Points in Solid-State, Materials, and Surface Science*. KDM Harris and PP Edwards (Editors). *Royal Society of Chemistry*, Cambridge, UK (2008), pp. 457-478.
- 9. BOOK CHAPTER: Gladden, LF, **Anadon**, **LD**, Lim, MHM, Sederman, AJ. 'Two-Phase Flow in Trickle-Bed Reactors.' NMR Imaging in Chemical Engineering. Wiley-VCH, Weinheim, Germany (2006), pp. 534-551.

#### **OTHER PUBLICATIONS**

- Chan, G, Anadon, LD. "Improving Decision Making for Public R&D Investment in Energy: Utilizing Expert Elicitation in Parametric Models." To be submitted in March 2017 to Research Policy. (Currently <u>EPRG Working</u> Paper 1631.)
- 2. Xu, X, **Anadon, LD**, Lee, L. 'Increasing Residential Building Energy Efficiency In China: An Evaluation of Policy Instruments.' Discussion Paper 2016-02, Energy Technology Innovation Policy research group, Belfer Center for Science and International Affairs, Harvard Kennedy School, April 2016.
- 3. Patterson, L, Jordaan, SM, **Anadon, LD.** 'A Spatiotemporal Exploration of Water Consumption Changes Resulting from the Coal-to-Gas Transition in Pennsylvania.' Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School and Nicholas Institute for Environmental Policy Solutions. <u>WP 01-2016.</u> Duke University, January 2016.
- Bosetti, V, Anadon, LD, Baker, ED, Reis, LA, Verdolini, E. 'The future of energy technologies: an overview of expert elicitations.' Working paper 01-2016. Green Growth Knowledge Platform (GGKP) Research Committee on Technology and Innovation. A partnership of OECD, UNEP, the World Bank and the Global Green Growth Institute. January 2016.
- 5. **Anadon, LD**, Chan, G, Harley, A, Matus, K, Moon, S, Murthy, S, Clark, WC. 'Making innovation work for sustainable development.' Harvard Kennedy School Working Paper RWP15-079. December 2015.
- 6. Narayanamurti, V, Anadon, LD, Chan, G, Bin-Nun, A. 'Securing America's Future: Realizing the Potential of the DOE National Laboratories'. Testimony to United States Senate (written). Senate Appropriations Subcommittee on Energy & Water Development. Hearing on Hearing on Securing America's Future. Washington, D.C, October 28, 2015. Available at: http://belfercenter.ksg.harvard.edu/publication/26067/.
- 7. Gallagher, KS, **Anadon, LD**. 'DOE Budget Authority for Energy Research, Development, & Demonstration Database.' Cambridge, Mass.: Cambridge, Mass.: *Fact Sheet*, Belfer Center for Science and International Affairs, HKS, September (2015).
- 8. **Anadon, LD**, Bunn, M, Narayanamurti, V. 'Response to: Closing the Energy-Demonstration Gap.' *Issues in Science & Technology*, Forum, Spring 2015 (<u>invited by *IS&T* editors</u>--*IS&T* is a journal of the U.S. National Academy of Sciences).
- 9. Huenteler, J, **Anadon, LD**, Lee, H, Santen, N. 'Commercializing Second-Generation Biofuels: Scaling Up Sustainable Supply Chains and the Role of Public Policy.' *Report for the Energy Technology Innovation Policy* research group, Belfer Center for Science and International Affairs, Harvard Kennedy School, November 13-14, 2014
- 10. Anadon, LD, Odumosu, T, Santen, NR. 'Inventing the Future to Address Societal Challenges: Venky Narayanamurti's 75th Birthday.' Science, Technology, and Public Policy Program, Belfer Center for Science and International Affairs, Harvard Kennedy School, School of Engineering and Applied Sciences, Harvard University and Sustainability Science Program, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, September 19-20, 2014.
- 11. Santen, NR. **Anadon, LD**. 'Electricity Technology Investments under Solar RD&D Uncertainty: How Interim Learning and Adaptation Affect the Optimal Decision Strategy.' Discussion Paper 2014-10, Discussion Paper for the Energy Technology Innovation Policy research group, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 2014.
- 12. **Anadon, LD,** Matus, K, Moon, S, Chan, G, Harley, A, Murthy, S, Timmer, V, Abdel Latif, A, Araujo, K, Booker, K, Choi, H, Dubrawski, K, Friedlander, L, Ingersoll, C, Kempster, E, Pereira, L, Stephens, J, Vinsel, L, Clark, WC. 'Innovation and Access to Technologies for Sustainable Development: Diagnosing Weaknesses and Identifying Interventions in the Transnational Arena.' *Sustainability Science Program Working Paper 2014-01*. Sustainability Science Program and Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, Cambridge, MA, 2014.
- 13. Siddiqi, A, Ereiqat, F, **Anadon, LD**. 'Assessing Future Water Availability in Arid Regions Using Composition and Salience of Decision Criteria.' *MIT Engineering Systems Division*, Working Paper Series ESD-WP-2014-10. March 2014.
- 14. **Anadon, LD.** 'Energy from Fossil Fuels: Challenges and Opportunities for Technology Innovation.' *U.S. Frontiers of Engineering book. U.S. National Academy of Engineering Press.* January 2014.
- 15. Conchado, A, **Anadon, LD,** Linares, P. 'Innovación en energía en España: Análisis y recomendaciones.' *Joint report by Economics for Energy and the Belfer Center for Science and International Affairs*. Released in Economics for Energy event in Madrid, Spain, January 11, 2013.

- 16. **Anadon, LD**, Bunn, M, Chan, G., Chan, M, Kempener, R, Jones, C, Logar, N., Lee, A, Narayanamurti, V. "Transforming U.S. Energy Innovation." (2011). Report. Belfer Center for Science and International Affairs. Harvard Kennedy School, Cambridge, MA.
- 17. **Anadon, LD** et al. 'International workshop on research, development, and demonstration to enhance the role of nuclear energy in meeting climate and energy challenges.' *Energy Technology Innovation Policy Workshop Report*, Belfer Center for Science and International Affairs, Harvard Kennedy School and ICARUS Project, Fondazione Eni Enrico Mattei and International Center for Climate Governance, April (2011).
- 18. Narayanamurti, V, **Anadon, LD**, Breetz, H, Bunn, M, Lee, H, Mielke, E. 'Transforming the Energy Economy: Options for Accelerating the Commercialization of Advanced Energy Technologies.' *Energy Technology Innovation Policy Workshop Report*, Belfer Center for Science and International Affairs, HKS, February (2011).
- 19. Kempener, K, **Anadon, LD**, Condor, J. 'Governmental Energy Innovation Investments, Policies and Institutions in the Major Emerging Economies: Brazil, Russia, India, Mexico, China, and South Africa.' *Energy Technology Innovation Policy Discussion Paper* 2010-16, Belfer Center for Science and International Affairs, HKS, November (2010).
- 20. **Anadon, LD**. 'UNIDO's National Cleaner Production Centres.' *Case study for Climate Strategies, UK*. Cambridge-based NGO on a project for the World Bank on how to set up "Climate Innovation Centers" to catalyze energy innovation in developing countries. August (2010).
- 21. Mielke, E, **Anadon, LD**, and Narayanamurti, V. 'Water Consumption of Energy Resource Extraction, Processing, and Conversion: A review of the literature for estimates of water intensity of energy-resource extraction, processing to fuels, and conversion to electricity.' *Energy Technology Innovation Policy Discussion Paper* No. 2010-15, Belfer Center for Science and International Affairs, Harvard Kennedy School, Harvard University, October (2010).
- 22. **Anadon, LD** et al. "DOE FY 2011 Budget Request for Energy Research, Development, Demonstration, and Deployment: Analysis and Recommendation." Cambridge, Mass.: Report for Energy Technology Innovation Policy research group, Belfer Center for Science and International Affairs, Harvard Kennedy School, April (2010).
- 23. **Anadon, LD**, Gallagher, KS, Bunn, M, Jones, C. "Tackling U.S. Energy Challenges and Opportunities: Preliminary Policy Recommendations for Enhancing Energy Innovation in The United States." Cambridge, Mass.: *Report for Energy Technology Innovation Policy research group*, Belfer Center for Science and International Affairs, Harvard Kennedy School, February 18 (2010).
- 24. **Anadon, LD**, Bunn, M, Chan, G, Chan M, Jones, C, Gallagher, KS, Narayanamurti, V.'DOE FY 2011 Budget Request for Energy Research, Development, Demonstration, and Deployment: Analysis and Recommendations.' Cambridge, Mass.: *Report for Energy Technology Innovation Policy research group*, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 25 (2009).
- 25. **Anadon, LD.** Bunn, M, Jones, C, and Narayanamurti, V. 'U.S. Public Energy Innovation Institutions and Mechanisms: Status & Deficiencies.' Cambridge, Mass.: *Policy Memo for the Science, Technology, and Public Policy Program*, Belfer Center for Science and International Affairs, Harvard Kennedy School, January (2010).
- Sagar, AD, and Anadon, LD. 'Climate Change: IPRs and Technology Transfer.' Prepared for the UNFCCC Secretariat. Bonn. Germany. May (2009).
- 27. **Anadon, LD**, Bunn, M, Gallagher, KS, 'DOE FY 2010 Budget Request and Recovery Act Funding for Energy Research, Development, Demonstration, and Deployment: Analysis and Recommendations.' Cambridge, Mass.: Report for Energy Technology Innovation Policy research group, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 25 (2009).
- 28. **Anadon, LD**, Bunn, M, and Gallagher, KS 'Tackling U.S. Energy Challenges and Opportunities: Preliminary Policy Recommendations for Enhancing Energy Innovation in The United States'. Cambridge, Mass.: *Report for Energy Technology Innovation Policy research group*, Belfer Center for Science and International Affairs, Harvard Kennedy School, February 18 (2009).
- 29. **Anadon, LD**, Bunn, M, and Gallagher, KS. 'DOE FY09 Budget Request for Energy Research, Development & Demonstration Commentary.' Cambridge, Mass.: *Report for Energy Technology Innovation Policy group*, Belfer Center for Science and International Affairs, Harvard Kennedy School, June 3 (2008).

### SELECTED CONFERENCE PRESENTATIONS

Climate, Energy and Innovation Policy

- 1. Presenter of paper on 'Entrepreneurial Ecosystems: The Role of Government Alliances as Drivers of Clean-Tech Start-Up Innovation.' In a Panel on "Demand Pull Policies and Energy Innovation" 2016 Fall Conference Association for Public Policy Analysis & Management. Washington D.C., United States. November 3-5, 2016.
- 2. Co-author of presentation by G Chan on "An Analytical Approach to Improving Public Energy R&D Investment Decisions." In a Panel on "Science and Technology Research and Development Funding" 2016 Fall Conference Association for Public Policy Analysis & Management. Washington D.C., United States. November 3-5, 2016.
- 3. Co-author of paper presented by C Doblinger on "Entrepreneurial ecosystems: The role of government alliances as drivers of innovation". *SPRU 50 Years Conference*. University of Sussex, September 7-9, 2016.
- 4. Co-author of paper presented by C Doblinger. 'Entrepreneurial Ecosystems: Assessing the Role of Governments and Partnerships as Drivers of Innovation and Growth.' 2016 *R&D Management Conference*. Cambridge, United Kingdom, 3-6 July 2016.
- 5. Presenter of paper coauthored with J Huenteler, T Tang and G Chan. 'Mind the Gaps Why hasn't Chinese Wind Power Lived Up to its Technical Potential? Conference on *Economics of innovation, diffusion, growth and the environment.*. Hosted by Grantham Research Institute and the Centre for Economic Performance, London School of Economics and Political Science, London, September 16-18, 2015.
- 6. Co-author of presentation by C Binz. 'Path transplantation in Global Innovation Networks: The Emergence of the Chinese Solar PV Industry.' 6th International Sustainability Transitions (IST-6) Conference. Brighton (UK). 25-28 August, 2015.
- 7. Co-author of presentation by C Doblinger. 'Entrepreneurial Ecosystems: The Role of Government, Partnerships, and Geographic Location in the US Clean Tech Sectors.' 75<sup>th</sup> Annual Meeting of the Academy of Management. Vancouver, Canada. August 7-11, 2015.
- 8. Plenary speaker. 'Innovation in Energy Technologies.' *34<sup>th</sup> International Energy Workshop*. Co-hosted by the International Renewable Energy Agency (IRENA) in Abu Dhabi. June 3, 4 2015.
- 9. Co-author of presentation by G Chan.' Using Expert Judgment, Modeling and Optimization to Inform Energy R&D Decisions.' Session on "Expert Judgment and Learning Curves in Energy & Environment." *INFORMS (Institute for Operations Research and the Management Sciences) Annual Meeting 2014.* San Francisco, CA, November 9-12, 2014.
- 10. Presenter. 'Technology Spillovers in Solar Photovoltaics: How Much Did They Matter and How Did They Happen.' Panel on "Drivers of renewable energy technology innovation." 2014 Fall Research Conference of the Association for Public Policy Analysis & *Management* (APPAM). Albuquerque, NM, November 6-8, 2014.
- 11. Co-author of presentation with J Hoppmann and V Narayanamurti. 'How Technological Frames and Focus Co-Evolve with the Organizational Environment.' 2014 Academy of Management Annual Meeting. Session on Technology Innovation and Sustainability. Philadelphia, PA, August 1-5, 2014.
- 12. Co-author of presentation by K Surana. Public Policy and the Adoption of Green Energy Innovations in Developing Countries: Wind Energy in China and India.' Parallel session in Innovation, Sustainable Development and Energy in the South. 12<sup>th</sup> Globelics International Conference. Addis Ababa, Ethiopia. 29<sup>th</sup>-31<sup>st</sup> October 2014.
- 13. Co-author of presentation with G Nemet and E Verdolini. 'Meta-Analysis of Expert Elicitations of Future Technology Outcomes'. 6<sup>th</sup> Annual Conference of the Society for Benefit-Cost Analysis Meeting, "Benefit-Cost Analysis for Evidence-Based Decision-Making." Washington D.C., March 14, 2014.
- 14. Presenter. 'Energy technology expert elicitations for policy: their use in models and what can we learn from workshops and metaanalysis.' Symposium on Methods for research synthesis: A cross-disciplinary approach. *Society for Risk Analysis Annual Meeting*, 2013. Baltimore, Maryland. December 8-11, 2013.
- 15. Co-author of presentation with N Santen. 'A Stochastic Model for Power Generation RD&D and Capital Investment Planning Under Decision-Dependent Uncertainty.' 10<sup>th</sup> International Conference on Computational Management Science. Montreal, May 1-3, 2013.
- 16. Co-author of presentation with E Verdolini. 'Meta-analysis of expert elicitations for future technology outcomes for nuclear power.' *12<sup>th</sup> International Association of Energy Economics (IAEE) European Energy Conference*. Venice, Italy. September 9-12, 2012.
- 17. Co-author of presentation with G Chan. 'Using expert assessments of technical uncertainties for R&D portfolio design: strategies for U.S. energy R&D budget allocation.' *Climate Change Impacts and Integrated Assessment Workshop.* Snowmass, CO, United States. August 1, 2012.
- 18. Co-author of presentation with H Choi. 'Relationships between network formation, complementary industrial sectors, and government policies.' *Proceedings of the XXIII ISPIM (International Society for Professional Innovation Management) Conference, 2012, Barcelona, Spain. June 17-20.*

- 19. Co-author of presentation with A Kajenthira. 'Agricultural enterprise in Saudi Arabia: Deconstructing the water-energy nexus.' *World Congress on Water, Climate, and Energy. International Water Association*. Dublin, Ireland. May 13-18, 2012.
- 20. Dual Plenary Session presenter. 'Energy Technologies: from Development to Deployment.' 30th U.S. Association of Energy Economics and International Association of Energy Economics North American Conference. 'Redefining the Energy Economy: Changing Roles of Industry, Government, and Research.' Washington D.C., United States. October 11, 2011.
- 21. Co-author of presentation with S Jordaan. 'Temporal aspects of water use in shale gas development: implications for LCA.' Session on Fossil Fuels. *Life Cycle Analysis (LCA) XI.* Chicago, MI, United States. October 4-6, 2011.
- 22. Presenter. 'Quantifying technology uncertainty and the impact of innovation policies on the distribution of environmental and security benefits of energy RD&D investments.' 30<sup>th</sup> International Energy Workshop. Stanford University, CA, United States. June 6-8, 2011.
- 23. Co-author of poster presentation with G Chan. 'Expert Elicitation of Cost, Performance, and RD&D Budgets for Coal Power with CCS.' *International Conference on Greenhouse Gas Technology (GHGT) 10.* Amsterdam, The Netherlands. September 19-23, 2010.
- 24. Co-author of full presentation with M Chan. 'Expert Elicitation of Cost, Performance, and RD&D Budgets for GHG Reducing Technologies.' *INFORMS (Institute for Operations Research and Management Science) Annual Meeting* 2009. Cluster on Decision Analysis. San Diego, CA, United States. October 14, 2009.
- 25. Co-author of full presentation with M Chan. 'A Technology-Based Greenhouse Gas Reduction Strategy for 2030.' *U.S. Society of Ecological Economics* 2009 Conference. Washington, D.C. United States. June 1, 2009.
- 26. Panelist with SR Connors (MIT) and S Mills (AAAS). 'Sustainable Energy: Basic Science and Energy-Technology-Innovation Policy.' *Annual Meeting of the Biophysical Society* 2009; Panel on Sustainable Energy, Basic Science and Government Policy. Boston, MA, United States. March 3, 2009.

### Multiphase Flow and MRI

- 27. Full presentation. 'Hydrodynamic transitions in trickle bed reactors using Magnetic Resonance Imaging.' *VDI-GVC-Fachausschusssitzung "Mehrphasenströmungen"* (Multiphase Flow Conference of the German Institution of Engineers). Überlingen bei Friedrichshafen, Germany. March 2-3, 2006.
- 28. Invited presenter. 'MRI in process engineering.' Institute of Process Engineering (IVT), University of Hannover. March 1, 2006. Hanover, Germany.
- 29. Full presentation. 'Hydrodynamic transitions in trickle-bed reactors using Magnetic Resonance Imaging.' 7<sup>th</sup> World Congress of Chemical Engineering. Glasgow, United Kingdom. 10<sup>th</sup>-14<sup>th</sup> July, 2005.
- 30. Full presentation. 'MRI Studies of the Trickle to Pulse Transition in Fixed Bed Reactors'. 5<sup>th</sup> International Symposium on Catalysis in Multiphase Reactors (CAMURE-5) & 4th International Symposium on Multifunctional Reactors (ISMR-4). Portoroz, Slovenia. 15<sup>th</sup>-18<sup>th</sup> June, 2005.
- 31. Full presentation. 'Hydrodynamics in Two-Phase Flow in Porous Media.' 7<sup>th</sup> International Conference in Magnetic Resonance in Porous Media. Ecole Polytechnique, Paris, France. July 4-8, 2004.
- 32. Full presentation. 'Hydrodynamic transition and periodic operation of trickle-bed reactors using MRI.' *Johnson Matthey Symposium of Catalytic Technology*. University of Nottingham, United Kingdom. March 25, 2005.
- 33. Full presentation. 'Studying hydrodynamic transitions and periodic operation of trickle-bed reactors using MRI.' Johnson Matthey Symposium of Catalytic Technology. University of Nottingham, United Kingdom. April 2004.

#### SELECTED INVITED PRESENTATIONS IN WORKSHOPS, SEMINARS, AND POLICY EVENTS

- 1. **Invited speaker.** Seminar to the Nature "Public Policy Community" at the *Nature* Headquarters. London, June 7, 2017.
- 2. **Invited speaker**. 'In Search of "Good" Energy Policy" Seminar. University of Cambridge. May 23, 2017.
- 3. **Invited speaker.** Council on Foreign Relations Workshop on "Harnessing International Cooperation to Advance Clean Energy Innovation Clean Energy Innovation." Session on 'Sharing Novel Domestic Institutions with International Partners.' Funded by the Sloan Foundation. New York City, March 29-30, 2017.
- 4. Invited Speaker. HKS/KFAS Workshop on "Science and Technology in the GCC: Building Research Capacity and Vital Linkages". Kuwait, March 22, 2017.
- 5. **Chair of session**. 'Session IV: The Atlantic Innovation Space.' *Harvard Atlantic Conference: Challenges and Opportunities to the Atlantic Basin in a Globalized World*. Madrid, Spain. March 15-17, 2016.
- 6. **Invited speaker.** *Science Policy Research Unit* (SPRU) Friday Seminar. University of Sussex, Brighton. December 9, 2016.

- 7. **Invited speaker**. International Symposium on Energy Innovation "The Role of Innovation for Long-Term GHG Mitigation." *Organized by the Canon Institute for Global Studies*. Tokyo, Japan. October 7, 2016.
- 8. **Invited speaker.** Session on Desirable R&D for Innovative Technologies and the Potential for International Cooperation. "Domestic energy innovation policy: 3<sup>rd</sup> Innovation for Cool Earth Forum (ICEF) 2016. Organized by the Japanese Ministry of Economy, Trade, and Industry (METI) and the New Energy Development Organization (NEDO) in Japan. Tokyo, Japan. October 5-6, 2016.
- 9. **Invited speaker.** 'International Workshop on Climate Strategies post-COP21 and Sustainable Economies in Europe.' *Aspen Institute Italia* and the Harvard Kennedy School. Florence, Italy, July 1-2, 2016.
- 10. **Invited presenter.** 'Making technology innovation work for sustainable development.' *Climate Policy Innovation Workshop*, The Graduate Institute, Geneva. May 26-27, 2016.
- 11. **Session speaker and conference co-organizer**. 'Enabling learning across sectors'. *Making Technological Innovation Work for Sustainable Development Conference*. Joint conference by the Harvard Sustainability Science Program and UCL STEaPP. May 11, 2011. London UK.
- 12. **Invited university-wide doctoral seminar speaker**. "Energy technology innovation and the role of governments: what it means for Spain". Universidad Pontificia de Comillas, ICADE/ICAI. Madrid, May 4, 2016.
- 13. **Invited seminar speaker**. "Energy technology innovation and the role of governments: state of the art, new developments, and key questions". *UCL Energy Seminar*. February 2, 2016.
- 14. **Invited keynote lecture**. *Geneva Dialogue Lecture*. 'Energy technology innovation and the role of domestic and international actors.' Joint event by The Graduate Institute Geneva and the Green Growth Knowledge Platform (an initiative of UNEP, OECD, the World Bank, and the Green Growth Initiative. Geneva, Switzerland. November 24, 2015
- 15. Panel Chair. Panel on 'Complexity and Resilience of the Food System.' *UCL Institute for Sustainable Resources Global Food Symposium*. University College London, November 9-10, 2015.
- 16. Invited seminar speaker. 'Wind power in emerging economies and the role of policy.' University of Cambridge, Energy Policy Research Group (Department of Economics and Judge Business School). October 27, 2015.
- 17. Presenter. 'Why hasn't wind power in China reached its technical potential?' Conference on Economics of innovation, diffusion, growth and the environment. London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment. Royal Society of Arts, London. September 16-18.
- 18. **Session speaker and conference co-organizer**. 'Energy Technology Innovation Policy in the Backdrop of the US/China Emissions Deal.' Joint workshop co-organized by Tsinghua University and the Harvard University Kennedy School. Tsinghua University, Beijing, June 18-19, 2015.
- 19. **Invited faculty** in *ETH Zurich Ph.D. Academy on Sustainability and Technology*. 'Innovation in the Energy Sector The Interplay of Technologies, Firms, and Institutions.' ETH Zurich, June 4-9, 2015. (One of four faculty members providing feedback to papers by 15 PhD students from all over the world)
- 20. **Invited thought leader**. Presenter in session on 'R&D portfolio analysis.' *U.S. Department of Energy Cornerstone Workshop of the Quadrennial Technology Review*. Arlington, VA, December 4-5, 2014.
- 21. Presenter. 'Innovation in energy technologies and public policy.' *Harvard University Center for the Environment Graduate Seminar*. Cambridge, MA, September 26, 2014.
- 22. Co-author of presentation by G Chan. 'Principles and innovative methods for public R&D decision-making.' *Modelling and Analyses in R&D Priority-Setting and Innovation Workshop, International Energy Agency*. Paris, France, April 23, 2014.
- 23. **Invited seminar speaker.** 'Technology Innovation in the Energy Sector: The Challenges of Policy Design". *MIT Leading Technology Policy Initiative Seminar Series*. MIT Cambridge, MA, February 27, 2014.
- 24. **Plenary speaker and presenter in the Academic Symposium** on 'R&D on Energy', organized by *FUNSEAM* and the Chair of Energy and Sustainability in the University of Barcelona. Barcelona, Spain, January 27-28, 2014.
- 25. Invited presenter. 'Energy technology expert elicitations for policy: their use in models and what can we learn from workshops and meta-analysis.' *Workshop on Methods for Research Synthesis: A Cross-Disciplinary Approach*. Harvard School of Public Health. Boston, MA, October 3, 2013.
- 26. **Invited speaker.** 'Challenges of our dependence on fossil fuels and of technology innovation.' **2013 U.S. Frontiers** of Engineering Symposium. National Academy of Engineering. Wilmington, Delaware. September 19-21, 2013
- 27. Invited presenter. 'Insights into technology cost dynamics: learning curves, innovation, and R&D.' AMPERE-ADVANCE-PIAMMDDI Technology Workshop. Funded by the EU 7<sup>th</sup> Framework Program for Research and the U.S. Department of Energy. Seville, Spain, May 27-28, 2013.
- 28. Invited presenter and adviser. 'Evaluación de Programas de Innovación en Energía en E.E.U.U.' World Energy Council, Mexico Chapter, Subsecretaría de Planeación de Energía (SENER), CONACYT (Mexico's NSF). Mexico City, March 18, 2013.

- 29. 'Energy Innovation Policy: Filling the Gaps and Managing Uncertainty.' Faculty seminar at the *Bren School of Environmental Science & Management, UC Santa Barbara*. Santa Barbara, CA. February 25, 2013.
- 30. 'The water-energy nexus in the Middle East and North Africa region.' Faculty seminar at the *Fletcher School of Law and Diplomacy, Tufts University. Medford, MA. January 17, 2013.*
- 31. 'Energy Innovation: Uncertainty and Learning', Faculty seminar at the *Harvard Kennedy School, Cambridge, MA, December 12, 2012.*
- 32. 'R&D investment decisions under uncertainty and the science of expert elicitations.' Seminar at the *Department of Engineering and Public Policy. Carnegie Mellon University*, Pittsburgh. November 26-27, 2012.
- 33. 'What is the government role in stimulating energy innovation.' *INNOVATION IdeaLab, WGBH Foundation* to help public television and radio come up with new programming (NOVA, Frontline, American Experience, BBC's THE WORLD radio series). Moderated by Miles O'Brien and Kara Miller at WGBH Boston. Boston. November 15, 2012.
- 34. 'Breaking down innovation in the energy sector.' Faculty seminar at *the School of Natural Resources, Energy & Resources Group, University of California Berkeley*, Berkeley, CA. November 1-2, 2012.
- 35. 'Energy R&D and National Energy Policy.' *American Association for the Advancement of Science (AAAS) Leadership Seminar in Science and Technology Policy.* Washington D.C. November 15, 2012.
- 36. 'Using scientific inputs for innovation policy.' Seminar at the *University of Cambridge, Department of Politics and International Studies*, Cambridge, United Kingdom. October 1, 2012.
- 37. 'RD&D investments under technical and policy uncertainty.' *MIT Electricity Student Research Group Guest Lecture*. Massachusetts Institute of Technology. Cambridge, MA, United States. December 6, 2011.
- 38. 'Innovation in Energy Technology as a Global Public Good.' *Innovation for Sustainability Working Group.*Sustainability Science Program, Harvard Kennedy School. Cambridge, MA, United States. November 7, 2011.
- 39. Invited presenter. 'Technology Assessment and Modeling (TEaM) Project First Workshop.' *Fondazione Eni Enrico Mattei*. Venice, Italy. September 1-2, 2011.
- 40. Invited presenter. 'Policy Options for Accelerating the Commercialization of Advanced Energy Technologies' International Energy Agency (IEA) 2<sup>nd</sup> Workshop on Accelerating Energy Innovation Project. Paris, France. May 24, 2011.
- 41. Invited presenter with A Lee. 'Uncertainty in the Benefits of RD&D.' Integrated Energy Policy Report 2010, Workshop on Benefits Assessment from the California Energy Commission. Sacramento, CA, United States. May 19, 2011.
- 42. 'Missions oriented energy RD&D Policies.' *Research Policy Workshop for Special Issue on Missions Oriented R&D Policies*. EPFL, Lausanne, Switzerland. May 16-17, 2011.
- 43. 'Energy and Innovation.' *University of Texas at Austin Energy Institute Symposium Series*. University of Austin, TX, United States. April 25, 2011.
- 44. 'Small and Modular Nuclear Reactors, their Potential, Regional Applicability, and RD&D Needs.' *International Workshop on: RD&D Needs to Enhance the Role of Nuclear Energy in Meeting Climate and Energy Challenges.* International Center for Climate Governance. Venice, Italy. April 7-8, 2011.
- 45. 'Transforming U.S. Energy Technology Innovation.' *Energy Policy Consortium and Energy Technology Innovation Policy group Seminar Series*. Harvard Kennedy School. Cambridge, MA, United States. March 21, 2011.
- 46. Workshop on Achieving Decarbonization: Transforming National Energy Systems. Fletcher School of Law and Diplomacy. Tufts University. Medford, MA, United States. March 10-11, 2011.
- 47. Invited presenter. 'Government Policies for Energy Innovation.' *Economics for Energy Workshop*. February 7-8, 2011. Madrid, Spain.
- 48. 'Methodologies for energy RD&D allocation incorporating uncertainty.' Workshop on '*R&D Portfolio Analysis: Tools and Methodologies*. Pacific Northwest National Laboratory, sponsored by the Climate Change Technology Program at the U.S. Department of Energy. College Park, MD, United States. December 2-3, 2010.
- 49. 'The U.S. Synthetic Fuels Program.' *Global Energy Assessment*. Workshop on Knowledge Module 24 on energy technology innovation systems. Yale University, New Haven, CT, United States. September 23-24, 2010.
- 50. 'Public-private interactions for the development and commercialization of energy technologies.' *KETEP 2010 Energy Technology Leaders Forum*. Held by the Ministry of Knowledge Economic and Korea's Institute for Energy Technology Evaluation and Planning. Seoul, Korea. April 21, 2010.

- 51. 'Renewable Energy Policies in the United States and Spain.' Workshop on "Legal Framework of Renewable Energies in the United States of America, the European Union, and Spain." Real Colegio Complutense, Cambridge, MA, United States. April 5-6, 2010.
- 52. 'Energy Research Development, Demonstration & Deployment Policy.' *Energy Technology Innovation Policy* & *Consortium for Energy Policy Research Seminar Series*. Harvard Kennedy School, Cambridge, MA, United States. November 23, 2009.
- 53. 'The Drivers of Technical Change in Energy and Government Policy.' *Global Energy Assessment Working Group on 'Energy Innovation Systems*,' *KM 24*. Harvard Kennedy School. Cambridge, MA, United States. April 2-3, 2009. '
- 54. 'Policy for Energy-Technology-Innovation.' Chapter presentation at the release event of the book on 'Acting in Time on Energy Policy' at the Brookings Institution. Washington D.C., United States. May 20, 2009. 'Tackling U.S. Energy Challenges and Opportunities: Preliminary Recommendations for Enhancing Energy Innovation.' 8th Carbon Mitigation Initiative Annual Meeting at Princeton University. Princeton, NJ, United States. February 11, 2009
- 55. 'Policy for Energy-Technology Innovation.' *Acting in Time on Energy Policy Conference*. Harvard Kennedy School and Charles Hotel. Cambridge, MA, United States. September 18, 2008.
- 56. 'Networking and Collaboration across Disciplines.' 5<sup>th</sup> Biennial National Symposium for the Advancement of Women in Science. Panelist with N Kopell, R Losick, and D Dabby. Harvard Faculty of Arts and Sciences. Cambridge, MA, United States. February 7, 2009.
- 57. Contributor to Key Research Questions Program. *Center for Science Policy at the University of Cambridge*. Cambridge, United Kingdom. This process involves providing key research questions, voting, and a symposium in April 5-7, 2011.
- 58. Expert interviewee. U.S. Department of Energy Program Analysis & Evaluation Division from the Office of the Chief Financial Officer. *Effort on reformulating the DOE's Strategic Plan—alignment to priorities set by the new administration*. Cambridge, MA, United States. August 18, 2009.
- 59. Invited participant. *Pacific Northwest National Laboratory Global Energy Technology Strategy Project. Annual Meeting and Technical Review.* University of Maryland at College Park and Cosmos Club. Washington D.C., United States. May 28-29, 2009.
- 60. Invited break-out participant. New York Academy of Sciences Workshop on Innovation and Clean Technology in New York State. Co-hosts: NYSERDA and NYSTAR. New York City, NY, United States. May 18, 2009.
- 61. Workshop participant. Energy Technology Innovation Policy (HKS)/Chinese Academy of Sciences/(Chinese) Ministry of Science and Technology Meeting. Harvard Kennedy School. Cambridge, MA, United States. April 16-17, 2009.
- 62. 'Expert interviewee.' New York Academy of Sciences, 2<sup>nd</sup> phase on project with NYSTAR and NYSERDA to assess assets and opportunities for New York State in clean technology. Cambridge, MA, United States. February 26, 2009
- 63. Participant. National Commission on Energy Policy Renewable Electricity Group. October 2-3, 2008. Denver, CO.
- 64. Participant. *National Commission on Energy Policy Building Efficiency Group*. Washington D.C., United States. October 28, 2008.
- 65. 'Research, Development, Demonstration & Deployment Policy: Past and Current Efforts in the United States and International Picture.' *The Keystone Energy Board Annual Meeting*. Washington D.C., United States. June 12, 2008.
- 66. Participant. Pacific Northwest National Laboratory Global Energy Technology Strategy Project. Annual Meeting and Technical Review. University of Maryland at College Park and Washington D.C., United States. May 28-29, 2008.

## TEACHING, RESEARCH SUPERVISION, AND SCHOOL SERVICE

# University of Cambridge, Department of Politics and International Studies, Cambridge, UK

University Lecturer in Public Policy: design and delivery of MPhil in Public Policy Modules on "Science, Evidence and Policy" and "Lent Term Policy Cases," both delivered in the Lent Term 2017; supervision and grading of independent research papers for 7 M.P.P. students.

Member of the POLIS Research Committee

Member of the MPP Admissions Committee (over 400 applications)

Human, Social and Political Sciences (HSPS) DoS at Peterhouse Ph.D. student co-supervision

## University College London, Department of Science, Technology, Engineering & Public Policy, London, U.K.

Visiting Senior Lecturer in Science, Technology, Innovation & Public Policy: design and delivery of 6/12 hours of "Research Methods" (STEPGP16) course for STEaPP PhD students. Instructor of 2 hour session on cost benefit analysis for the MPA students as part of the "Analytic Methods" course. Lead discussant in the "STEaPP PhD Student Book Seminar"

#### Harvard University, John F. Kennedy School of Government, Cambridge, USA

Assistant Professor of Public Policy, 2013-: design and delivery of core course for MPP students in "Policy Analysis" API-505m (Fall 2013, 2014) with Dan Levy

Adjunct Lecturer, 2011-2013: design and delivery of "Energy Innovation Policy" IGA-525m for MPP and MPAID students (Fall 2011, Spring, 2013)

Ph.D. advisor and research supervisor for Policy Analysis Exercises (HKS masters thesis)

Executive education teaching in program on "Innovation for Development" in June 2013

MPP Admissions Committee 2014

Chair of IGA Faculty Committee on the Future of Teaching S&T and Policy at HKS: the other two members were Matthew Bunn and David Keith. Final report delivered on February 2015

### University of Cambridge, Department of Chemical Engineering, Cambridge, UK

"Reactors" course supervisor (equivalent to teaching fellow) and 4th Year Research Project Supervisor, 2004-2006

# OTHER ACTIVITIES

#### **Advisory Boards and Committees**

- Academic Board of the Atlantic Basin Research Project of the Weatherhead Center of International Affairs at Harvard University, focus on climate change and international relations and innovation. March 2016-.
- Advisory Board for the International Science Partnership program of the Federation of American Scientists
- Advisory Board for the International Energy Agency's Project on "Accelerating Energy Technology Innovation"
- Selected by the *Packard Foundation* to take part in *a new pilot program* to find new strategies for the philanthropic community to mitigate climate change. Selected in March 2014 as one of 40 top innovators/thinkers in the climate mitigation space globally. Invited to send a one page proposal about an innovative strategy that philanthropic organizations could support to encourage climate change mitigation. In April 2014, was *selected as one of 6 top innovators* to write a full proposal with a significant likelihood of implementation.
- Scientific Committee for the World Congress on Water, Climate, and Energy of the *International Water Association* (IWA), Dublin 2012, and Mexico D.F. 2014.
- Harvard College Fulbright Evaluation Committee

# **International Collaborations**

- Awarded Horizon 2020 (H2020) grant from the European Commission in June 2016. "INNOPATHS: Innovation Pathways, Strategies and Policies for the Low-Carbon Transition in Europe." Dr. Anadon is the leader of Work Package 1.
- Contributing Author: Global Energy Assessment, a major review on energy coordinated by the Institute for Applied Systems Analysis (Austria) and supported by governments, non-government organizations, and the United Nations (20109-2012).
- Project Co-Director: Technology Evaluation and Modeling (TEaM) Project aimed at incorporating uncertainty about technical change in energy-economic models and understanding its impact on the costs of climate change

- mitigation. Other partners are the Fondazione Eni Enrico Mattei (Italy), the Pacific Northwest National Lab, Carnegie Mellon University, the University of Massachusetts at Amherst (2012-2014).
- Project Manager of the Energy Research, Development, Demonstration and Deployment (ERD3) Policy Project funded (2008-2010) for by the Doris Duke Charitable Foundation (the project lasted for 3 years and had 4 postdoctoral fellows each year)
- Project Co-Director: *Innovation and Access to Technologies for Sustainable Development* is a project that seeks to advance and apply understanding of the processes governing innovation of technologies that contribute to sustainable development by undertaking interdisciplinary research on technologies in the energy, water, agriculture, pharmaceuticals, and manufacturing sectors (2012-2016).
- Co-PI with Prof. Su Jun at the Tsinghua School of Public Policy and Management (China): We are conducting a comparative analysis on innovation policy instruments in energy in China and the United States (2014-2017).
- Co-author of report for OECD on the use of expert elicitations in technologies for energy policy with V Bosetti, E Baker, E Verdolini and LA Reis (2014-2016).

#### PROFESSIONAL AFFILIATIONS

Association for Public Policy Analysis and Management (APPAM), Member 2014, 2016
Member of the Society for Risk Analysis 2012-2013
American Economic Association 2014-2015
Fellow of the Cambridge Philosophical Society
Associate Member of the Institution of Chemical Engineers (IChemE), United Kingdom (1999-2008)

## SERVICE IN SCHOLARLY JOURNALS

Editorial Advisory Panel Member: Nature Energy

**Member of the Editorial Board:** Environmental Research Reviews (reviews section of Environmental Research Letters journal)

Journal Editor: Sustainable Production and Consumption

Member of the Editorial Board: Energy Research & Social Science

Editor: Papeles de Energia (public interest publication to inform the Spanish energy transition)

Reviewer of Journals: Science, Proceedings of the National Academy of Sciences, Environmental Science & Technology, Nature Climate Change, Energy Policy, Climatic Change, Research Policy, Energy Economics, Energy, Public Library of Science ONE, Ecological Economics, Technology Forecasting & Social Change, Science of Science Policy, Journal of Cleaner Production, Sustainable Production & Consumption, Energy Research & Social Science, Environmental Modelling & Software. (Also asked to review for several other journals, e.g. The Energy Journal, Nature Geoscience, and others, but had to decline due to time constraints.)

# **OTHER SERVICE**

**Reviewer of Reports and Grants:** U.S. National Science Foundation grants, and U.K. Engineering and Physical Sciences Research Council grants, Council of Canadian Academies report, U.S. National Academy of Sciences report (declined), invited contributor to the UK EPSRC Chemical Engineering International Benchmarking, 2013.

# **OTHER SKILLS**

#### Languages

- Fluent in English and Spanish.
- Advanced level in German.
- Intermediate level in French.

## Computers

- Languages: Visual Basic. Process simulators: PRO/II, Aspen, ANSYS.
- Operating systems: Windows, Unix
- Applications: Stata, Office, Matlab, TecPlot, KaleidaGraph.

## **MEDIA** (under construction)

Coverage of 2017 Nature Energy article on "Integrating uncertainty into public energy research and development decisions":

• Phys.org, Science Newsline, EurekAlert!, Health Medicinet, Homeland Security News Wire <a href="https://phys.org/news/2017-05-investments-good-climate-economies.html">https://phys.org/news/2017-05-investments-good-climate-economies.html</a>, <a href="https://www.sciencenewsline.com/news/2017050916010061.html">https://www.sciencenewsline.com/news/2017050916010061.html</a>, <a href="https://www.eurekalert.org/pub\_releases/2017-05/uoc-rri050817.php">https://www.eurekalert.org/pub\_releases/2017-05/uoc-rri050817.php</a>, <a href="https://healthmedicinet.com/i/right-rd-investments-are-good-bets-for-both-climate-and-economies-say-researchers/">https://www.homelandsecuritynewswire.com/dr20170512-right-research-development-investments-good-bets-for-both-climate-and-economies</a>

Coverage of research on Nature Energy article on the U.S. National Labs in late 2016:

 Oped in *The National Interest* (October 25, 2015) "How to Fix the National Laboratories" http://nationalinterest.org/feature/how-fix-the-national-laboratories-18181

### Coverage of DOE RD&D database:

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Between 2009 and 2014 other pieces of Diaz Anadon's research have been highlighted in outlets including: the Council on Foreign Relations, the Harvard Gazette, the American Society of Mechanical Engineers Magazine, the Global CCS Institute, Eos Transactions from the American Geophysical Union, The Information Technology & Innovation Foundation, The Breakthrough Institute, Esciencenews.com, Science News Online, RealClearEnergy.org,

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