# **Roger Fouquet Curriculum Vitae** January 2025

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#### CURRENT POSITION:

Principal Research Fellow, Energy Studies Institute, National University of Singapore (NUS), Singapore

#### PAST POSITIONS:

PAST POSITIONS:	
2022-2024:	Senior Research Fellow, Energy Studies Institute, NUS
2013-2022:	Associate Professorial Research Fellow, Grantham Research Institute on Climate Change and
	the Environment (GRI), London School of Economics and Political Science (LSE), UK
2009-2013:	Ikerbasque Research Professor, Basque Centre for Climate Change (BC3), Bilbao, Spain
2007-2008:	Senior Lecturer, School of Economics, Faculty of Business and Economics, University of the
	South Pacific (USP), Suva, Fiji
2005-2006:	Lecturer, School of Economics, Faculty of Business and Economics, USP, Suva, Fiji
2002-2005:	Research Fellow, Department of Environmental Policy, Imperial College London, London
1995-2002:	Research Associate, Department of Environmental Science & Technology, Imperial College
	London, London, UK
1993-1996	Research Fellow, Department of Economics, University of Surrey, Guildford, UK
1992:	Research Assistant, Roben Institute of Health and Safety, University of Surrey, Guildford, UK

#### **EDUCATION:**

1997: PhD Economics, University of Surrey, UK

MSc Energy Economics, University of Surrey, UK 1991:

1990: BA Economics with Mathematics, University of Sussex, UK

#### AWARDS:

2010: Choice Magazine Outstanding Academic Title in 2009 for Heat, Power and Light IAEE Campbell Watkins Award for Best Paper in The Energy Journal 2006 2006:

BIEE/Financial Times Andrew Holmes Memorial Award 1996:

### SECONDMENTS:

2001: Strategy Team, The Carbon Trust, London, UK

Environment and Industry Branch, Department of Trade and Industry (DTI), London, UK 1994:

# **VISITING APPOINTMENTS:**

2022-Present Visiting Senior Fellow, Grantham Research Institute on Climate Change, LSE, UK 2005-Present: Honorary Research Fellow, Centre for Environmental Policy, Imperial College London. 1998-2022 Visiting Professeur, Centre Economie et Gestion, Institut Français de Pétrole (IFP School), Rueil-Malmaison, France

Visiting Senior Fellow, Grantham Research Institute on Climate Change, London School of 2012-2013:

Economics, UK

2012: Visiting Professor, Barcelona Graduate School of Economics, Barcelona, Spain

1996-2005: Visiting Research Fellow, Surrey Energy Economics Centre, (S.E.E.C.), Department of

Economics, University of Surrey, Guildford, UK

Visiting Professor, Thammasat University, Bangkok, Thailand 2003:

1998-2003: Visiting Research Fellow, Institute for Advanced Studies Carinthia, Klagenfurt, Austria

#### ADDITIONAL RESPONSIBILITIES (SELECTED):

Head, Energy Economics Division, Energy Studies Institute, NUS 2023-Present: Advisor on Air Travel Demand, UK Climate Change Committee (CCC) 2024

2020-2022: Reviewer, Intergovernmental Panel on Climate Change (IPCC)

2018-Present: Scientific Committee, Journal of Energy History

2017-2022 Head, Growth & Innovation Research Programme, GRI, LSE 2014-2020: Associate Editor, New Palgrave Dictionary of Economics

2010-2013: Lead Analyst, Global Energy Assessment

Editor, Energy Economics, New Economics Papers http://repec.org/ 1998-Present:

#### **PUBLICATIONS**

#### **BOOKS AND EDITED SPECIAL ISSUES:**

Fouquet, R. (2019) Handbook on Green Growth. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Fouquet, R. (2018) The Economics of Renewable Energy. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Fouquet, R. (2013) Handbook on Energy and Climate Change. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Fouquet, R. and P. J.G. Pearson (2012) Past and Prospective Energy Transitions: Insights from History. Energy Policy 50.

Fouquet, R. (2008) *Heat, Power and Light: Revolutions in Energy Services.* Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

#### **ARTICLES:**

Graziano, M., Michieka, N., Musso, M., and Fouquet, R. (2024) 'Energy Transitions of declining energy industries: the effect of Renewable Portfolio Standards on the U.S. coal industry.' Environmental Research: Energy 1(4) 045003. https://doi.org/10.1088/2753-3751/ad7d11

Fouquet, R. (2023) 'The digitalisation, dematerialisation and decarbonisation of the global economy in historical perspective: the relationship between energy and information since 1850.' *Environmental Research Letters* 19(1) 014043 <a href="https://doi.org/10.1088/1748-9326/ad11c0">https://doi.org/10.1088/1748-9326/ad11c0</a>.

Otojanov, R., Fouquet, R., and Granville, B. (2023) 'Factor prices and induced technical change in the Industrial Revolution.' *Economic History Review* 76(2) 599-623. https://doi.org/10.1111/ehr.13194

Fouquet, R. and T. O'Garra (2022) 'In search of progressive and effective climate policies: comparing the distributional impacts of an air travel carbon tax and a frequent flyer levy.' *Energy Policy* 171C: 113278 https://doi.org/10.1016/j.enpol.2022.113278

Michieka, N.M, Graziano, M., Musso, M. and Fouquet, R. (2022) 'Energy Transitions and Labor Market Patterns in the U.S. Coal Industry.' Structural Change and Economic Dynamics 63: 501-514. doi: https://doi.org/10.1016/j.strueco.2022.07.005.

O'Garra, T. and Fouquet, R. (2022) 'Willingness to reduce travel consumption to support a low-carbon transition beyond COVID-19'. Ecological Economics 193: 107297. https://doi.org/10.1016/j.ecolecon.2021.107297

Fouquet, R. and Hippe, R. (2022) 'Twin Transitions of Decarbonisation and Digitalisation: A Historical Perspective on Energy and Information in European Economies.' *Energy Research & Social Science* 91: 102736. https://doi:10.1016/j.erss.2022.102736

Saunders, H., Roy, J., Azevedo, I.M.L., Chakravarty, D., Dasgupta, S., de la Rue du Can, S., Druckman, A., Fouquet, R., Grubb, M., Lin, B.Q., Lowe, R., Madlener, R., McCoy, D., Mundaca, L., Oreszczyn, T., Sorrell, S., Stern, D., Tanaka, K., Wei, T. (2021) 'Energy Efficiency: What has it Delivered in the Last 40 years?' *Annual Review of Environment and Resources* 46 135-65. https://doi:10.1146/annurev-environ-012320-084937

Chitnis, M., Fouquet, R., and Sorrell, S. (2020) 'Rebound effects for household energy services in the UK.' *The Energy Journal* 41(4) 123-151. https://doi:10.5547/01956574.41.4.mchi

Fouquet, R. (2018) 'Consumer surplus from energy transitions.' The Energy Journal 39(3) 167-88. https://doi:10.5547/01956574.39.3.rfou

Tsao, J.Y., Schubert, E.F., Fouquet, R. and Lave, M. (2018) 'The Electrification of Energy: Long-Term Trends and Opportunities.' MRS Energy & Sustainability https://doi:10.1557/mre.2018.6.

Hippe, R. and Fouquet, R. (2018) 'The knowledge economy in historical perspective.' World Economics 18(1) 75-107.

Fouquet, R. (2017) 'Make low-carbon energy an integral part of the knowledge economy.' Nature 551(7682) S141.

van de Ven, D.J. and Fouquet, R. (2017) 'Historical Energy Price Shocks and their Changing Effects on the Economy.' *Energy Economics* 62 204-216.

Fouquet, R. (2016) 'Path Dependence in Energy Systems and Economic Development.' Nature Energy 1(8) 16098.

Fouquet, R. (2016) 'Energy Services.' New Palgrave Dictionary of Economics.

Fouquet, R. (2016) 'Lessons from Energy History for Climate Policy: Technological Change, Demand and Economic Development.' Energy Research & Social Science 22 79-93.

Fouquet, R. (2016) 'Historical energy transitions: Speed, prices and system transformation.' Energy Research & Social Science 22 7-12.

Fouquet, R. and S.N. Broadberry (2015) 'Seven Centuries of European Economic Growth and Decline.' *Journal of Economic Perspectives* 29(4) 227-44.

Fouquet, R. (2015) 'The allocation of energy resources in the very long run.' *Journal of Natural Resource* Policy Research (Special Issue on William Nordhaus) 7(2-3) 147-156.

Fouquet, R. (2014) 'Long run demand for energy services: income and price elasticities over 200 years.' Review of Environmental Economics and Policy 8(2) 186-207.

Fouquet, R. and P.J.G. Pearson (2012) 'The long run demand for lighting: elasticities and rebound effects in different phases of economic

development.' Economics of Energy and Environmental Policy 1(1) 83-100.

Fouquet, R. (2012) 'Trends in income and price elasticities of transport demand (1850-2010).' Energy Policy 50: 50-61.

Fouquet, R. (2012) 'The demand for environmental quality in driving transitions to low-polluting energy sources.' *Energy Policy* 50: 130-41.

Fouquet, R. and P.J.G. Pearson (2012) 'Past and Prospective Energy Transitions: Insights from History.' Editorial for *Energy Policy* (Special Issue on Past and Prospective Energy Transitions) 50: 1-7.

Fouquet, R. (2011) 'Divergences in long run trends in the prices of energy and energy services.' Review of Environmental Economics and Policy 5(2) 196-218.

Fouquet, R. (2011) 'Long run trends in energy-related external costs.' Ecological Economics 70(12) 2380-9.

Fouquet, R. (2010) 'The slow search for solutions: lessons from historical energy transitions by sector and service.' *Energy Policy* 38(11) 6586-96.

Fouquet, R. and P.J.G. Pearson (2006) 'Seven centuries of energy services: the price and use of lighting in the United Kingdom (1300-2000).' *The Energy Journal* 27(1) 139-77.

Fouquet, R. (2003) 'The Carbon Trading Game.' Climate Policy (special Emissions Trading issue) 3(2) 143-55.

Fouquet, R. and P.J.G. Pearson (2003) 'Five centuries of energy prices.' World Economics 4(3) 93-119.

Grubb, M., C. Hope and R. Fouquet (2002) Climatic implications of the Kyoto Protocol: the contribution of international spillovers. *Climatic Change* 54 11-28.

Grimston, M., V. Karakousis, R. Fouquet, R. van der Vorst, P.J.G. Pearson and M.Leach (2001) 'The European and global potential for carbon sequestration in tackling climate change.' Climate Policy 1(2) 155-171.

Hart, D., M.A. Leach, R. Fouquet, P.J.G. Pearson, and A. Bauen (2000) 'Methanol infrastructure - will it affect the introduction of SPFC vehicles?' *Journal of Power Sources* 86(1) 542-7.

Fouquet, R. and P.J.G. Pearson (1998) 'A thousand years of energy use in the United Kingdom.' The Energy Journal 19(4) 1-41.

Fouquet, R (1998) 'The United Kingdom demand for renewable electricity in a liberalised market.' Energy Policy 26(4) 281-94.

Fouquet, R, D. Hawdon, P.J.G. Pearson, C. Robinson and P.G. Stevens (1997) 'The future of UK final user energy demand.' *Energy Policy* 25(2), 231-40.

Gage, H. and R. Fouquet (1997) 'Explaining breast cancer mortality in England: the effect of socioeconomic factors and health care services.' European Journal of Cancer Prevention 6(4) 341-50.

Pearson, P.J.G. and R. Fouquet (1996) 'Energy efficiency, economic efficiency and future carbon dioxide emissions from the developing world.' The *Energy Journal* 17(4), 1-26.

Fouquet, R and H. Gage (1996) 'The role of screening in reducing invasive cervical cancer registrations in England.' *Journal of Medical Screening* 4(3)70-8.

Fouquet, R. (1995) 'The impact of VAT introduction on residential energy demand: an investigation using the co-integration approach.' *Energy Economics* 17(3) 237-47.

## CONTRIBUTIONS TO EDITED BOOKS:

Fouquet, R. (2025) 'A Historical Perspective on Energy Innovation: Energy Transitions, Efficiency Improvements, Rebound Effects and Consumer Welfare Impacts' in Anadon, L.D., Sagar, A., Verdolini, E., and Malhotra, A. (ed.) Handbook on Energy Innovation. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Hippe, R. and R. Fouquet (2024) 'The human capital transition and the role of policy' in Diebolt, C. and Haupert, M. (eds.) Handbook of Cliometrics Vol.II. Springer-Verlag. 2<sup>nd</sup> edition.

Diebolt C., Fouquet R., Hippe R. (2020) 'Cliometrics and the Evolution of Human Capital.' In Kouli Y., Pawlowsky P., Hertwig M. (eds) Wissensökonomie und Digitalisierung. Springer VS, Wiesbaden.

Fouquet, R. and Hippe, R. (2019) 'The Transition from a Fossil-Fuel Economy to a Knowledge Economy' in Fouquet, R. (ed.) Handbook on Green Growth. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Fouquet, R. (2019) 'Introduction' in Fouquet, R. (ed.) Handbook on Green Growth. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Hippe, R. and R. Fouquet (2019) 'The human capital transition and the role of policy' in Diebolt, C. and Haupert, M. (eds.) Handbook of Cliometrics Vol.II. Springer-Verlag.

Fouquet, R. (2018) 'Introduction' in Fouquet, R. (ed.) The Economics of Renewable Energy. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Zenghelis, D., Fouquet, R., and Hippe, R. (2018) 'Stranded Assets: then and now' in Caldecott, B. (ed.) Stranded Assets and the Environment: Risk, Resilience, and Opportunity. Routledge. London.

Fouquet, R. (2013) 'Low- carbon economy: dark age or golden age?' in Fouquet, R. (ed.) Handbook on Energy and Climate Change. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Yeager, K., F. Dayo, M. Dominik, R. Fouquet, A. Gilau, R. Hosier, A. Miller, S. Rao, S. Sethi (2012) 'Economy and Energy' in N. Nakicenovic, L. Gomez-Echeverri and T.B. Johansson (eds.) Global Energy Assessment. Cambridge University Press. Cambridge.

Fouquet, R. (2011) 'The Sustainability of `Sustainable' Energy Use: Historical Evidence on the Relationship between Economic Growth and Renewable Energy' in I. Galarraga, M. González-Eguino and A. Markandya (eds.) *Handbook of Sustainable Energy*. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

Fouquet, R. (2009) 'A brief history of energy' in J. Evans and L.C. Hunt (eds.) *International Handbook of the Economics of Energy*. Edward Elgar Publications. Cheltenham, UK, and Northampton, MA, USA.

P.J.G. Pearson and R. Fouquet (2003) 'Long run carbon dioxide emissions and Kuznets curves: pathways to development' in L. Hunt (ed.) *Energy in a Competitive Market*. Edward Elgar. Cheltenham.

Madlener, R. and Fouquet, R. (2002) 'Markets for tradable renewable electricity certificates Dutch experience and British prospects' A New Era for Energy? Price Signals, Industry Structure and Environment. Oxford University Press, Oxford.

Fouquet, R. (2000) 'Lessons for the United Kingdom from previous experiences in the demand for renewable electricity' in Mackerron, G. and P. Pearson (eds): The International Energy Experience. Imperial College Press, London.

#### SELECTED BOOK REVIEWS:

Fouquet, R. (2023) 'Grand Transitions.' The Energy Journal 44 (2) 290-293.

Fouquet, R. (2018) 'Energy: A Human History by Richard Rhodes.' Nature 557 162-3.

Fouquet, R. (2017) 'Energy and Civilization: A History by Vaclav Smil.' Nature 544 (7648) 29-30.

Fouquet, R. (2014) 'Power to the People: Energy in Europe over the Last Five Centuries by Astrid Kander, Paolo Malanima and Paul Warde.' *Journal of Economic Literature* 52(4) 1194-6.

#### COMMENTARIES/OP-ED:

Fouquet, R. "Why impose a sustainable aviation fuel levy on passengers flying from Singapore?", Channel News Asia (CNA) Commentary, 29 March 2024.

Fouquet, R. (2023) "COP28 Raises Questions about the Future of Singapore's Fossil Fuel-Reliant Industries", *Channel News Asia (CNA) Commentary*, 16 December 2023.

### WORKING PAPERS (SUBMITTED OR IN PROGRESS) & RECENT PRESENTATIONS:

Ho, K.H.Y., Ee, A.W.L, Son, M., Rahmani, S., Liyaff, F.M., and Fouquet, R. (2024) 'Environmental impact assessment of solar panel production and recycling in Southeast Asia.' Working Paper.

Broadstock, D.C., Fouquet, R. and Kim, J.W. (2024) 'Carbon pricing and stock performance: are carbon prices already more influential than energy prices? Working Paper.

Fouquet, R. (2024) 'Long Run Perspectives on Energy and Climate Change.' Seminar. Center for Collective Learning, Artificial and Natural Intelligence Institute (ANITI), University of Toulouse, and Corvinus Institute of Advanced Studies (CIAS), Corvinus University, Budapest. 29 May. On-line.

Fouquet, R. and Singer, G.A. (2022) 'Net Domestic Consumer Surplus, 1700-2017.' Economic Statistics Centre of Excellence (ESCoE) Conference on Economic Measurement (EM). University of Strathclyde, Glasgow, 25-27 May.