Neil Strachan

List of Publications by Year
in descending order

53 papers	3,244 citations	159585 30 h-index	182427 51 g-index
53 all docs	53 docs citations	53 times ranked	2848 citing authors

#	Article	IF	Citations
1	OSeMOSYS: The Open Source Energy Modeling System. Energy Policy, 2011, 39, 5850-5870.	8.8	538
2	Formalizing best practice for energy system optimization modelling. Applied Energy, 2017, 194, 184-198.	10.1	235
3	A review of socio-technical energy transition (STET) models. Technological Forecasting and Social Change, 2015, 100, 290-305.	11.6	166
4	Marginal abatement cost (MAC) curves: confronting theory and practice. Environmental Science and Policy, 2011, 14, 1195-1204.	4.9	154
5	The critical role of the industrial sector in reaching long-term emission reduction, energy efficiency and renewable targets. Applied Energy, 2016, 162, 699-712.	10.1	149
6	A Review of Criticisms of Integrated Assessment Models and Proposed Approaches to Address These, through the Lens of BECCS. Energies, 2019, 12, 1747.	3.1	119
7	Modelling the UK residential energy sector under long-term decarbonisation scenarios: Comparison between energy systems and sectoral modelling approaches. Applied Energy, 2009, 86, 416-428.	10.1	117
8	Methodological review of UK and international low carbon scenarios. Energy Policy, 2010, 38, 6056-6065.	8.8	105
9	Hybrid modelling of long-term carbon reduction scenarios for the UK. Energy Economics, 2008, 30, 2947-2963.	12.1	100
10	Emissions from distributed vs. centralized generation: The importance of system performance. Energy Policy, 2006, 34, 2677-2689.	8.8	95
11	An integrated systematic analysis of uncertainties in UK energy transition pathways. Energy Policy, 2015, 87, 673-684.	8.8	93
12	The iterative contribution and relevance of modelling to UK energy policy. Energy Policy, 2009, 37, 850-860.	8.8	88
13	Soft-linking energy systems and GIS models to investigate spatial hydrogen infrastructure development in a low-carbon UK energy system. International Journal of Hydrogen Energy, 2009, 34, 642-657.	7.1	85
14	Indirect CO₂ Emission Implications of Energy System Pathways: Linking IO and TIMES Models for the UK. Environmental Science & Technology, 2015, 49, 10701-10709.	10.0	83
15	Reinvigorating the scenario technique to expand uncertainty consideration. Climatic Change, 2016, 135, 373-379.	3.6	75
16	Critical mid-term uncertainties in long-term decarbonisation pathways. Energy Policy, 2012, 41, 433-444.	8.8	72
17	Reinventing the energy modellingâ€“policy interface. Nature Energy, 2016, 1, .	39.5	59
18	The uncertain but critical role of demand reduction in meeting long-term energy decarbonisation targets. Energy Policy, 2014, 73, 575-586.	8.8	56

#	Article	IF	Citations
19	Supporting security and adequacy in future energy systems: The need to enhance long-term energy system models to better treat issues related to variability. International Journal of Energy Research, 2015, 39, 377-396.	4.5	56
20	Distributed generation and distribution utilities. Energy Policy, 2002, 30, 649-661.	8.8	54
21	Towards a low-carbon economy: scenarios and policies for the UK. Climate Policy, 2011, 11, 865-882.	5.1	51
22	The structure of uncertainty in future low carbon pathways. Energy Policy, 2013, 52, 45-54.	8.8	49
23	Interactions and implications of renewable and climate change policy on UK energy scenarios. Energy Policy, 2010, 38, 6724-6735.	8.8	47
24	Modelling energy transitions for climate targets under landscape and actor inertia. Environmental Innovation and Societal Transitions, 2017, 24, 106-129.	5.5	46
25	An expert elicitation of climate, energy and economic uncertainties. Energy Policy, 2013, 61, 811-821.	8.8	42
26	Take me to your leader: Using socio-technical energy transitions (STET) modelling to explore the role of actors in decarbonisation pathways. Energy Research and Social Science, 2019, 51, 67-81.	6.4	39
27	Myopic decision making in energy system decarbonisation pathways. A UK case study. Energy Strategy Reviews, 2017, 17, 19-26.	7.3	37
28	Realising transition pathways for a more electric, low-carbon energy system in the United Kingdom: Challenges, insights and opportunities. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2017, 231, 440-477.	1.4	35
29	The role of bioenergy in the UKâ€™s energy future formulation and modelling of long-term UK bioenergy scenarios. Energy Policy, 2010, 38, 5799-5816.	8.8	34
30	Regional winners and losers in future UK energy system transitions. Energy Strategy Reviews, 2016, 13-14, 11-31.	7.3	34
31	Incorporating homeowners' preferences of heating technologies in the UK TIMES model. Energy, 2018, 148, 716-727.	8.8	32
32	CCS in the North Sea region: A comparison on the cost-effectiveness of storing CO2 in the Utsira formation at regional and national scales. International Journal of Greenhouse Gas Control, 2011, 5, 1517-1532.	4.6	28
33	A deep dive into the modelling assumptions for biomass with carbon capture and storage (BECCS): a transparency exercise. Environmental Research Letters, 2020, 15, 084008.	5.2	27
34	Policy implications from the Low-Carbon Society (LCS) modelling project. Climate Policy, 2008, 8, S17-S29.	5.1	22
35	The role of international drivers on UK scenarios of a low-carbon society. Climate Policy, 2008, 8, S125-S139.	5.1	22
36	Synergies and trade-offs between governance and costs in electricity system transition. Energy Policy, 2015, 85, 170-181.	8.8	22

#	Article	IF	Citations
37	The impact of heterogeneous market players with bounded-rationality on the electricity sector low-carbon transition. Energy Policy, 2020, 138, 111274.	8.8	22
38	UK energy policy ambition and UK energy modellingâ€"fit for purpose?. Energy Policy, 2011, 39, 1037-1040.	8.8	21
39	Characterising the Evolution of Energy System Models Using Model Archaeology. Environmental Modeling and Assessment, 2015, 20, 83-102.	2.2	21
40	Electricity and Conflict: Advantages of a Distributed System. Electricity Journal, 2002, 15, 55-65.	2.5	19
41	The co-evolution of climate policy and investments in electricity markets: Simulating agent dynamics in UK, German and Italian electricity sectors. Energy Research and Social Science, 2020, 65, 101458.	6.4	17
42	Business-as-Unusual: Existing policies in energy model baselines. Energy Economics, 2011, 33, 153-160.	12.1	16
43	Failure to achieve stringent carbon reduction targets in a second-best policy world. Climatic Change, 2012, 113, 121-139.	3.6	15
44	The key role of historic path-dependency and competitor imitation on the electricity sector low-carbon transition. Energy Strategy Reviews, 2021, 33, 100588.	7.3	9
45	Setting greenhouse gas emission targets under baseline uncertainty: the Bush Climate Change Initiative. Mitigation and Adaptation Strategies for Global Change, 2007, 12, 455-470.	2.1	8
46	Low-Carbon Society (LCS) modelling. Climate Policy, 2008, 8, S3-S4.	5.1	6
47	Economic Impacts of Future Changes in the Energy Systemâ€"National Perspectives. Lecture Notes in Energy, 2015, , 359-387.	0.3	6
48	A Comparison of national CCS strategies for Northwest Europe, with a focus on the potential of common CO2 storage at the Utsira formation. Energy Procedia, 2011, 4, 2401-2408.	1.8	5
49	Economic Impacts of Future Changes in the Energy Systemâ€"Global Perspectives. Lecture Notes in Energy, 2015, , 333-358.	0.3	5
50	Distributed Energy, Overview. , 2004, , 823-839.		4
51	The role of international drivers on UK scenarios of a low-carbon society. Climate Policy, 2008, 8, S125.	5.1	2
52	Supplier strategies and responses to institutional drivers for an emerging energy technology. International Journal of Global Energy Issues, 2004, 21, 383.	0.4	1
53	A Low-Carbon Transition. , 2012, , 75-91.		1