Steven J. Davis

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Research Interests

Coupled human and natural systems and sustainable systems analysis, including especially: energy technology and policy; pollution and natural resources embodied in international trade; socio-economic inertia and "lock-in" of environmental problems; assessments of impacts and vulnerabilities; and the complex interactions of energy systems, agriculture, climate change and global ecology

Education

2008 — *PhD, Geological and Environmental Sciences*
Stanford University – Stanford, CA
Advisor: C. Page Chamberlain

2001 — *JD, Virginia School of Law*
University of Virginia – Charlottesville, VA

1998 — *BA, Political Science / Philosophy*
University of Florida – Gainesville, FL
Double major with honors, Phi Beta Kappa

Student and Postdoctoral Advisees

Julianne DeAngelo, Doctoral Student
Robert Fofrich, Doctoral Student
Dan Tong, Postdoctoral Scholar
Chaopeng Hong, Postdoctoral Scholar
Anna LoPresti, Masters Student (Graduated)
Yue Qin, Former Postdoctoral Scholar (now an Assistant Professor at Ohio State University)
Christine Shearer, Former Postdoctoral Scholar (now at CoalSwarm)

Community Service and Outreach

- Journal Referee: *Nature, Science, Science Advances, Nature Climate Change, Nature Energy, Nature Geoscience, Nature Sustainability, Nature Food, Nature Communications, PNAS, Joule, Energy & Environmental Science, Geophysical Research Letters, ES&T, Energy Policy, Ecological Economics, Environmental Research Letters*
- Contributing Author, IPCC 6th Assessment Report (AR6)
- Member, Scientific Steering Committee, Global Carbon Project
- Chair, Industry Working Group, U.N. SDSN U.S. Zero Carbon Action Plan
- Mentor, AGU Mentoring Network (2019)
- Contributing Author, Energy Systems Chapter, 2nd State of the Carbon Cycle Report, 2018
- Editorial Board, *Environmental Research Letters* (2011-2019)
- Advisory Board Member: UCI Solutions that Scale; Long US-China Institute

Recent and Upcoming Talks and Meetings

- EU-US Frontiers of Engineering Symposium, Stockholm, Sweden, November 2019
- Pennsylvania State University, October 2019
- Princeton University, October 2019
- Energy Resources Engineering, Stanford University, November 2020
- Payne Institute, Colorado School of Mines, November 2020

Academic Experience

2020 - present	*Professor, Earth System Science*
2017-present	*Affiliated Professor, Civil and Environmental Engineering*
2016 - 2020	*Associate Professor, Earth System Science*
2012-2016	*Assistant Professor, Earth System Science* University of California, Irvine – Irvine, CA
Summers *2015-present*	*Visiting Faculty, Center for Earth System Science* Tsinghua University – Beijing, China
2015, 2017	*Young International Distinguished Professor, Institute of Applied Ecology* Chinese Academy of Sciences – Shenyang, China
2010-2012	*Visiting Scholar, Joint Institute for the Study of Atmosphere and Ocean* University of Washington – Seattle, CA
2009-2010	*Guest Investigator, Marine Policy Center* Woods Hole Oceanographic Institute – Woods Hole, MA
2008-2012	*Postdoctoral Scholar, Department of Global Ecology* Carnegie Institution of Washington - Stanford, CA
2004-2008	*Research Assistant, Stable Isotope Biogeochemistry Laboratory* Stanford University – Stanford, CA

Professional Experience

2009-2017	*Co-Founder and Chief Scientist* Near Zero – Seattle, WA
2006-2010	*Co-Founder and Executive Director* The Climate Conservancy – Stanford, CA
2002-2004	*Associate Attorney, Corporate & Securities Group* Gray, Cary, Ware & Freidenrich, LLP – Palo Alto, CA

JOURNAL PUBLICATIONS (* indicates student or postdoc author)

Google Scholar h-index: 49
ORCID 0000-0002-9338-0844
ReseacherID: F-9968-2010

94 publications, mean impact factor: **12.3**

in review

Wang, Y, Z Deng, P Ciais, Z Liu, SJ Davis, P Gentine, and Q Ge. Transportation CO_2 emissions stayed high despite recurrent COVID outbreaks.

Hannam, P, C Shearer, **SJ Davis**, N Dubash, S Batterman, and R Socolow. Global deceleration and dispersal of coal power development.

Lamb, WF, T Wiedmann, J Pongratz, R Andrew, M Crippa, J Olivier, D Wiedenhofer, G Mattioli, A Al Khourdajie, J House, S Pachauri, M Figueroa, Y Saheb, R Slade, K Hubacek, L Sun, SK Ribeiro, S Khennas, S de la Rue de le Can, L Chapungu, **SJ Davis**, I Bashmakov, H Dai, S Dhakal, X Tan, Y Geng, B Gu, and J Minx. A review of trends and drivers of greenhouse gas emissions by sector from 1990 to 2018.

Fennell, P, **SJ Davis**, and A Mohammed. Decarbonising cement production.

Weir, B, D Crisp, CW O'Dell, S Basu, A Chatterjee, T Oda, LE Ott, S Pawson, B Poulter, Z Zhang, P Ciais, Z Liu, and **SJ Davis**. Regional impacts of COVID-19 on carbon dioxide detected worldwide from space.

Le Quéré, CL, GP Peters, P Friedlingstein, RM Andrea, JG Canadell, **SJ Davis**, RB Jackson, and MW Jones. Fossil CO_2 emissions in the post-COVID era.

Liu, Z, B Zhu, P Ciais, **SJ Davis**, C Lu, H Zhong, P Ke, Y Cui, Z Deng, D Cui, T Sun, X Dou, J Tan, R Guo, B Zheng, K Tanaka, W Zhao, and P Gentine. Decarbonization of global energy use during the COVID-19 pandemic.

DeAngelo, J, I Azevedo, J Bistline, L Clarke, G Luderer, E Byers, and **SJ Davis**. Net-zero CO_2 emissions scenarios.

Guo, R, J Wang, L Bing, D Tong, P Ciais, **SJ Davis**, RM Andrew, F Xi, and Z Liu. Global CO_2 uptake of cement in 1930-2019.

Benz, S, **SJ Davis**, J Burney. Drivers and projections of global surface temperature anomalies at sub-city scale.

Tong, D*, G Geng, Q Zhang, J Cheng, X Qin, C Hong*, and **SJ Davis**. Health co-benefits of climate change mitigation depend on strategic power plant retirements.

Tian, S, H He, A Kendall, **SJ Davis**, OA Ogunseitan, JM Schoenung, S Samuelsen, and B Tarroja. Environmental trade-offs of flow battery energy storage in California.

Tong, D*, DJ Farnham, L Duan, Q Zhang, NS Lewis, K Caldeira, and **SJ Davis**. Geophysical constraints on the reliability of solar and wind power worldwide.

Zheng, Y, G Geng, Q Zhang, T Xue, H Zhao, D Tong*, B Zheng, M Li, F Liu, C Hong*, K He and **SJ Davis**. Drivers of $PM_{2.5}$ air pollution deaths in China 2002-2017.

Yan, L, D Tong*, F Liu, Q Wu G Geng, **SJ Davis**, and Q Zhang. Modernizing global coal-fired power plants could drastically reduce mercury emissions.

Jenkins, J.D., SP Burger, AP Goldstein, K Caldeira, J Bergerson, **SJ Davis**, J DeCarolis, E Grubert, NS Lewis, G Nemet, N Systrom, S Yeh, B Zotter. Guiding energy innovation: modeling to support investment in climate solutions.

Arellano-Gonzales, J, A AghaKouchak, J Burney, **SJ Davis**, MC Levy, Y Qin*, and FC Moore. Adaptive benefits of agricultural water markets.

in press Hong, C*, JA Burney, J Pongratz, JEMS Nabel, ND Mueller, RB Jackson, and **SJ Davis**. Global and regional drivers of land-use greenhouse gas emissions 1961-2017. Nature.

2020 93. Wang, D, D Guan, S Zhu, M MacKinnon, G Geng, Q Zhang, H Zheng, T Lei, P Gong and **SJ Davis.** Economic footprint of California wildfires in 2018. Nature Sustainability. doi: 10.1038/s41893-020-00646-7

92. Zheng, B, G Geng, P Ciais, **SJ Davis**, R Martin, F Chevallier, Y Lei, K He, and Q Zhang. Satellite-based estimates of decline and rebound in China's daily CO_2 emissions during and after COVID-19 lockdown. Science Advances. V. 6, n. 49, p. eabd4998, doi: 10.1126/sciadv.abd4998

91. Chevallier, F, B Zheng, G Broquet, P Ciais, Z Liu, **SJ Davis**, Z Deng, Y Wang, F-M Bréon, and CW O'Dell. Local anomalies in the carbon dioxide column-averages across the globe during the first months of the coronavirus recession. Geophysical Research Letters. v. 47, p. e2020GL090244, doi: 10.1029/2020GL090244

90. Liu, Z, P Ciais, Z Deng, **SJ Davis**, B Zheng , Y Wang, Y Lei , D Cui, B Zhu, X Dou, P Ke, T Sun, R Guo, C Lu, R Guo, O Boucher, F-M Bréon, E Boucher, and F Chevallier. Carbon Monitor: a near-real-time daily dataset of global CO_2 emission from fossil fuel and cement production. Scientific Data. doi: 10.1038/s41597-020-00708-7

89. Ayompe,L; **SJ Davis**, and B Egoh. Trends and drivers of African fossil fuel CO_2 emissions 1990-2017. Environmental Research Letters. doi: 10.1088/1748-9326/abc64f

88. Liu, Z, Z Deng, P Ciais, R Lei, **SJ Davis**, S Feng, B Zheng , D Cui, X Dou, P He, B Zhu, C Lu, P Ke, T Sun, Y Wang, X Yue, Y Wang, Y Lei , H Zhou, Z Cai, Y Wu, R Guo, T Han, J Xue, O Boucher, F Chevallier, E Boucher, Y Wei, Q Zhang, D Guan, P Gong, DM Kammen, K He, and HJ Schellnhuber. Near-real-time monitoring of global CO_2emissions reveals the effects of the COVID-19 pandemic. Nature Communications. v. 11, p. 5172, doi: 10.1038/s41467-020-18922-7

87. Zheng, Y, Q Zhang, D Tong*, **SJ Davis**, and K Caldeira. Climate effects of China's efforts to improve its air quality. Environmental Research Letters. v. 15, p. 104052, doi: 10.1088/1748-9326/ab9e21

86. Yuan, M, F Tong, L Duan, JA Dowling, **SJ Davis**, NS Lewis, and K Caldeira. Would firm generators facilitate or deter variable renewable energy in a carbon-free electricity system? Applied Energy. V. 279, p. 115789, doi: 10.1016/j.apenergy.2020.115789

85. Tong, F, M Yuan, NS Lewis, **SJ Davis**, and K Caldeira. Effects of deep reductions in storage costs on highly reliable solar and wind-based electricity system costs. iScience. v. 23, p. 101484, doi: 10.1016/j.isci.2020.101484

84. Sergi, B, I Azevedo, **SJ Davis**, and N Muller. Regional and county flows of particulate matter damage in the U.S. Environmental Research Letters. doi: 10.1088/1748-9326/abb429

83. Shearer, C, D Tong*, R Fofrich*, and **SJ Davis**. Committed emissions of the U.S. power sector, 2000-2018. AGU Advances. doi: 10.1029/2020AV000162

82. Dowling, JA, KZ Rinaldi, TH Ruggles, **SJ Davis**, M Yuan, F Tong, NS Lewis, and K Caldeira. Role of long-duration energy storage in variable renewable electricity systems. Joule. doi: 10.1016/j.joule.2020.07.007

81. Hong, C*, Q Zhang, Y Zhang, **SJ Davis**, X Zhang, D Guan, Z Liu, and K He. Weakening aerosol radiative effects may mitigate the climate penalty on Chinese air quality. Nature Climate Change. doi: 10.1038/s41558-020-0840-y

80. Diffenbaugh, NS, CB Field, E Appel, I Azevedo, D Baldocchi, M Burke, J Burney, P Ciais, **SJ Davis**, AM Fiore, S Fletcher, T Hertel, DE Horton, S Hsiang, RB Jackson, X Jin, M Levi, DB Lobell, GA McKinley, FC Moore, A Montgomery, LC Nadeau, D Pataki, JT Randerson, M Reichstein, J Schnell, SI Seneviratne, D Singh, A Steiner, and G Wong-Parodi. The COVID-19 lockdowns: A window into the Earth system. Nature Reviews Earth & Environment. doi: 10.1038/s43017-020-0079-1

79. Huang, X, A Ding, J Gao, B Zheng, D Zhou, X Qi, R Tang, C Ren, W Nie, X Chi, J Wang, Z Xu, L Chen, Y Li, F Che, N Pang, H Wang, D Tong*, W Qin, W Cheng, W Liu, Q Fu, F Chai, **SJ Davis**, Q Zhang, and K He. Enhanced secondary pollution offset reduction of primary emissions during COVID-19 lockdown in China. National Science Review. doi: 10.1093/nsr/nwaa137

78. Guan, D, D Wang, S Hallegatte, **SJ Davis**, J Huo, S Li, Y Bai, T Lei, Q Xue, D Coffmann, D Cheng, P Chen, X Liang, B Xu, X Lu, S Wang, K Hubacek, and P Gong. Global supply chain effects of COVID-19 control measures. Nature Human Behaviour. doi: 10.1038/s41562-020-0896-8

77. Fofrich, R*, D Tong*, K Calvin, H Sytze de Boer, J Emmerling, O Fricko, S Fujimori, G Luderer, J Rogelj, and **SJ Davis**. Early retirement of power plants in climate mitigation scenarios. Environmental Research Letters. doi: 10.1088/1748-9326/ab96d3

76. Sadegh, M, A AghaKouchak, I Mallaakpour, LS Huning, O Mazdiyasni, M Niknejad, E Foufoula-Gergiou, FC Moore, J Brouwer, JA Burney, A Farid, A Martinez, ND Mueller, and **SJ Davis**. Data and analysis toolbox for modeling the nexus of food, energy, and water. Sustainable Cities and Society. doi: 10.1016/j.scs.2020.102281

75. Sergi, B, P Adams, N Muller, AL Robinson, **SJ Davis**, J Marshall, and I Azevedo. Aligning climate and health benefits of power plant siting and retirement decisions. Environmental Science and Technology. doi: 10.1021/acs.est.9b06936

74. Qin, Y*, J Abatzoglou, S Siebert, L Huning, A AghaKouchak, **SJ Davis**, and ND Mueller. Agricultural vulnerability to changing snowmelt. Nature Climate Change. doi: 10.1038/s41558-020-0746-8

73. Hong, C*, ND Mueller, J Burney, Y Zhang, A AghaKouchak, FC Moore, Y Qin*, D Tong*, and **SJ Davis**. Impacts of ozone and climate change on yields of perennial crops in California. Nature Food. v. 1, p. 166-172, doi: 10.1038/s43016-020-0043-8

72. Sloat, LL, **SJ Davis**, J Gerber, FC Moore, D Ray, PC West, ND Mueller. Climate adaptation by crop migration. Nature Communications. v. 11, p. 1243, doi: 10.1038/s41467-020-15076-4

71. Zheng, Y, **SJ Davis**, GG Persad, and K Caldeira. Climate effects of aerosols reduce economic inequality. Nature Climate Change. v. 10, p. 220-224, doi: 10.1038/s41558-020-0699-y

2019

70. Xiaoping, L, F Pei, S Wang, Y Wen, X Li, J Wu, J Chen, K Feng, J Liu, K Hubacek, **SJ Davis**, L Yu, Z Liu, C Wu, Y Cai, and W Yuan. Global urban expansion offsets climate-driven increases in terrestrial net primary productivity. Nature Communications. v. 10, p. 5558, doi: 10.1038/s41467-019-13462-1 (*Top 50: Earth and Planetary Sciences*)

69. Zhao, H, Q Zhang, **SJ Davis**, X Li, Y Liu, G Geng, M Li, B Zheng, H Huo, L Zhang, DK Henze, and K He. Inequality of household consumption and air pollution deaths in China. Nature Communications. v. 10, p. 4337, doi: 10.1038/s41467-019-12254-x

68. Hong, C*, Q Zhang, Y Zhang, **SJ Davis**, D Tong, Y Zheng, K He, and HJ Schellnhuber. Impacts of climate change on future air quality and human health in China. Proceedings of the National Academy of Sciences. v. 116, p. 17193-17200, doi: 10.1073/pnas.1812881116

67. Tong, D*, Q Zhang, Y Zheng, K Caldeira, C Shearer, C Hong*, Y Qin*, and **SJ Davis**. Committed emissions from existing energy infrastructure may jeopardize 1.5 °C climate target. Nature. v. 572, p. 373-377, doi: 10.1038/s41586-019-1364-3. **Cited >100 times**

66. Qin, Y*, ND Mueller, S Siebert, RB Jackson, A AghaKouchak, JB Zimmerman, J Burney, D Tong*, C Hong*, and **SJ Davis**. Flexibility and intensity of global water use. Nature Sustainability. v. 2, p. 515-523, doi: 10.1038/s41893-019-0294-2

65. Ratledge, N, **SJ Davis**, and L Zachary. Public lands fly under climate radar. Nature Climate Change. v. 9, p. 92-93, doi: 10.1038/s41558-019-0399-7

2018

64. Woodard, D*, **SJ Davis**, and JT Randerson. Economic carbon cycle feedbacks may offset additional warming from natural feedbacks. Proceedings of the National Academy of Sciences. doi: 10.1073/pnas.1805187115

63. Xie, W, W Xiong, J Pan, T Ali, Q Cui, J Meng, ND Mueller, L Erda, and **SJ Davis**. Decreases in global beer supply due to extreme drought and heat. Nature Plants. v. 4, p. 964-973, doi: 10.1038/s41477-018-0263-1

62. **Davis, SJ** and J Taneja. Without a back-up plan Nature Sustainability. v. 1, p. 538-539

61. SR Stephenson, W Wang, CS Zender, H Wang, **SJ Davis**, and PJ Rasch. Climatic responses to future trans-Arctic shipping. Geophysical Research Letters. doi: 10.1029/2018GL078969

60. Guan, D, J Meng, D Reiner, N Zhang, Y Shan, Z Mi, S Shao, Z Liu, and **SJ Davis**. Structural decline in China's CO_2 emissions through transitions in industry and energy systems. Nature Geoscience. v. 11, p. 551-555, doi: 10.1038/s41561-018-0161-1 **Cited >100 times**

59. **Davis, SJ**, NS Lewis, M Shaner, S Aggarwal, D Arent, IL Azevedo, SM Benson, T Bradley, J Brouwer, Y-M Chiang, CT Clack, A Cohen, S Doig, J Edmonds, P Fennell, CB Field, B Hannegan, B-M Hodge, MI Hoffert, E Ingersoll, P Jaramillo, KS Lackner, KJ Mach, M Mastrandrea, J Ogden, PF Peterson, DL Sanchez, D Sperling, J Stagner, JE Trancik, C-J Yang, and K Caldeira. Net-zero emissions energy systems. Science, v. 360, p. 1419 **Cited >300 times**

58. Shan, Y, D Guan, K Hubacek, B Zheng, **SJ Davis**, L Jia, J Liu, Z Liu, N Fromer, Z Mi, J Meng, D Xiangzheng, Y Li, J Lin, H Schroeder, H Weisz, and HJ Schellnhuber. City-level climate change mitigation in China. Science Advances, v. 4, n. 6, doi: 10.1126/sciadv.aaq0390

57. Meng, J, D Guan, **SJ Davis**, K Feng, J Liu, Z Liu, S Shao, X Wang, Q Zhang, and S Tao. The rise of South-South trade and its effect of global CO_2 emissions. Nature Communications. v. 9, p. 1871, doi: 10.1038/s41467-018-04337-y (*Top 50: Earth and Planetary Sciences*) **Cited >100 times**

56. Zheng, B, Q Zhang, **SJ Davis**, P Ciais, C Hong, M Li, F Liu, D Tong, H Li, and K He. Infrastructure shapes differences in the carbon intensities of Chinese cities. Environmental Science & Technology. doi: 10.1021/acs.est.7b05654

55. **SJ Davis**. Predicting unpredictability. Nature Energy, v. 3, p. 257-258, doi: 10.1038/s41560-018-0127-y

54. Victor, DG, A Abdullah, D Auston, W Brase, K Brown, **SJ Davis**, C Kappel, A Meier, M Modera, RZ Pass, D Phillips, J Sager, D Weil, and the TomKat Natural Gas Exit Strategies Working Group. Turning Paris into Reality at the University of California. Nature Climate Change, v. 8, p. 174-185, doi: 10.1038/s41558-018-0103-3

53. Shaner, M, **SJ Davis**, NS Lewis, and K Caldeira. Geophysical constraints on the reliability of solar and wind power. Energy and Environmental Science, v. 11, p. 914-925, doi: 10.1039/c7ee03029k. **Cited >100 times**

52. Tong, D*, Q Zhang, **SJ Davis**, F Liu, B Zheng, G Geng, T Xue, M Li, C Hong, Z Lu, DG Streets, D Guan, and K He. Targeted emission reductions from global super-polluting power plant units. Nature Sustainability, v. 1, p. 59-68, doi: 10.1038/s41893-017-0003-y

2017

51. Caro, D, **SJ Davis**, E Kebreab, and F Mitloehner. Land-use change emissions from soybean feed embodied in Brazilian pork and poultry meat. Journal of Cleaner Production, doi: 10.1016/j.jclepro.2017.11.146

50. Zhao, H, X Li, X Jiang, Q Zhang, J Lin, GP Peters, M Li, G Geng, B Zheng, H Huo, L Zhang, **SJ Davis**, and K He. Effects of atmospheric transport and trade on air pollution deaths in China. Atmospheric Chemistry and Physics, v. 17, p. 10367-10381

49. Madadgar, S, A AghaKouchak, A Farahmand, L Li, and **SJ Davis.** Probabilistic estimates of drought impacts on agricultural production. Geophysical Research Letters, doi: 10.1002/2017GL073606

48. Clack, CT, SA Qvist, J Apt, M Bazilian, A Brandt, K Caldeira, **SJ Davis**, V Diakov, M Handschy, P Hines, P Jaramillo, DM Kammen, JCS Long, MG Morgan, A Reed, V Sivaram, J Sweeney, GR Tynan, DG Victor, JP Weyant, and JF Whitacre. Evaluation of a proposal for reliable low-cost grid power with 100% wind, water, and solar. Proceedings of the National Academy of Sciences, v. 114, n. 26, p. 6722-6727. **Cited >200 times**

47. Mazdiyasni, O, A AghaKouchak, **SJ Davis**, S Madadgar, A Mehran, E Ragno, M Sadegh, A Sengupta, S Ghosh, CT Dhanya, and M Niknejad. Increasing probability of mass-mortality during Indian heatwaves. Science Advances, v. 3, n. 6, e1700066, doi: 10.1126/sciadv.1700066. **Cited >100 times**

46. Shearer*****, C, R Fofrich*, and **SJ Davis**. Future CO_2 emissions and electricity generation from proposed coal-fired power plants in India. Earth's Future, v. 5, p. 408-416

45. Zhang, Q, X Jiang, D Tong, **SJ Davis**, H Zhao, G Geng, T Feng, B Zheng, Z Lu, DG Streets, J Lin, R Ni, D Guan, M Brauer, RV Martin, H Huo, Z Liu, D Pan, H Kan and K He. Transboundary health impacts of transported global air pollution and international trade. Nature, v. 543, p. 705-709, doi: 10.1038/nature21712 **Cited >400 times**

2016

44. Xi, F, **SJ Davis**, P Ciais, D Crawford-Brown, D Guan, C Pade, T Shi, J Lv, L Ji, L Bing, J Wang, W Wei, K-H Yang, I Galan, Y Zhang and Z Liu. Substantial global carbon uptake by cement carbonation. Nature Geoscience, v. 9, p. 880-883 **Cited >100 times**

43. Jones, CD, P Ciais, **SJ Davis**, P Friedlingstein, T Gasser, GP Peters, J Rogelj, DP van Vuuren, JG Canadell, A Cowie, RB Jackson, M Jonas, E Kriegler, E Littleton, JA Lowe, J Milne, G Shrestha, P Smith, A Torvanger and A Wiltshire. Simulating the Earth system response to negative emissions. Environmental Research Letters, v. 11, p. 095012 (*ERL Highlight of 2016*)

42. Lin, J, D Tong, **SJ Davis**, R Ni, X Tan, D Pan, H Zhao, Z Lu, DG Streets, T Feng, Q Zhang, Y Yan, Y Hu, J Li, Z Liu, K He, Y Huang and D Guan. Globalized climate forcing of aerosols via international trade. Nature Geoscience, v. 9, p. 790-794, doi: 10.1038/ngeo2798

41. Seto, KC, **SJ Davis**, RB Mitchell, E Stokes, G Unruh, D Urge-Vorsatz. Carbon lock-In: Types, causes, and policy implications. Annual Reviews of Environment and Resources, v. 41, p. 19.1-19.28 **Cited >200 times**

40. Shearer*****, C, M West, K Caldeira and **SJ Davis**. Quantifying expert consensus against the existence of a secret, large-scale atmospheric spraying program. Environmental Research Letters, v. 11, p. 084011 (*ERL Highlight of 2016*)

39. **Davis, SJ** and NS Diffenbaugh. Dislocated interests and climate change. Environmental Research Letters, v. 11, p. 034009

38. Feng, K, **SJ Davis**, L Sun and K Hubacek. Correspondence: Reply to 'Reassessing the contribution of natural gas to US CO_2 emission reductions since 2007.' Nature Communications, v. 7, p. 10693

37. Smith, P, **SJ Davis**, F Creutzig, S Fuss, J Minx, B Gabrielle, E Kato, RB Jackson, A Cowie, E Kriegler, D van Vuuren, J Rogelj, P Ciais, J Milne, JP Canadell, D McCollum, V Krey, G Shrestha, P Friedlingstein, T Gasser, A Grübler, WK Heidug, M Jonas, CD Jones, F Kraxner, E Littleton, J Lowe, JR Moreira, N Nakicenovic, M Obersteiner, A Patwardhan, G Peters, M Rogner, E Rubin, A Sharifi, A Torvanger, Y Yamagata, J Edmonds and C Yongsung. Biophysical and economic limits to negative CO_2 emissions. Nature Climate Change, v. 6, p. 42-50, doi: 10.1038/nclimate2870 **Cited >700 times**

2015

36. Hannam, P, Z Liao, **SJ Davis**, and M Oppenheimer. Developing country finance in a post-2020 global climate agreement. Nature Climate Change, v. 5, p. 983-987

35. Liu, Z, **SJ Davis**, K Feng, K Hubacek, S Liang, and LD Anadon. Targeted opportunities to address the climate-trade dilemma in China. Nature Climate Change, v. 6, p. 201-206 **Cited >100 times**

34. Rozenberg, J, **SJ Davis**, U Narloch, S Hallegatte. Climate constraints on the carbon intensity of economic growth. Environmental Research Letters, v. 10, p. 095006

33. LoPresti*****, A, A Charland, D Woodard, JT Randerson, NS Diffenbaugh, and **SJ Davis**. Rate and velocity of climate change caused by cumulative carbon emissions. Environmental Research Letters, v. 10, p. 095001

32. Liu, Z, D Guan, W Wei, **SJ Davis**, P Ciais, J Bai, S Peng, Q Zhang, K Hubacek, G Marland, R Andres, DC Brown, J Lin, H Zhao, C Hong, TA Boden, K Feng, G Peters, F Xi, J Liu, Y Li, Y Zhao, N Zeng, and K He. Reduced carbon emission estimates from fossil fuel combustion and cement production in China. Nature, v. 524, p. 335-338 **Cited >600 times**

31. Kimball, S, M Lulow, Q Sorenson, K Balazs, Y Fang, **SJ Davis**, and T Huxman. Cost-effective ecological restoration. Restoration Ecology, doi: 10.1111/rec.12261

30. Pongratz, J, E Hansis, and **SJ Davis**. Relevance of methodological choices for accounting of land use change carbon fluxes. Global Biogeochemical Cycles, v. 29, p. 1230-1246

29. Feng, K, **SJ Davis**, L Sun, and K Hubacek. Drivers of the US CO_2 emissions 1997-2013. Nature Communications, v. 6, p. 7714 **Cited >200 times**

28. Zhao, HY, Q Zhang, **SJ Davis**, DB Guan, Z Liu, H Huo, JT Lin, WD Liu, and KB He. Assessment of China's virtual air pollution transport embodied in trade by a consumption-based emission inventory. Atmospheric Chemistry and Physics, v. 15, p. 5443-5456. **Cited >100 times**

27. Liu, J, H Mooney, V Hull, **SJ Davis**, J Gaskell, T Hertel, J Lubchenco, KC Seto, P Gleick, C Kremen, and S Li. Systems integration for global sustainability. Science, v. 347, p. 963 **Cited >700 times**

2014

26. Caro, D, A LoPresti*, **SJ Davis**, S Bastianoni, and K Caldeira. CH_4 and N_2O emissions embodied in international trade of meat. Environmental Research Letters, v. 9, p. 114005

25. **Davis, SJ** and C Shearer*. A crack in the natural-gas bridge. Nature, v. 514, p. 436-437

24. Shearer*, C, J Bistline, M Inman, and **SJ Davis**. The effect of natural gas supply on US renewable energy and CO_2 emissions. Environmental Research Letters, v. 9, p. 094008 (*ERL Highlight of 2014*)

23. Raupach, MR, **SJ Davis**, GP Peters, RM Andrew, JG Canadell, P Ciais, P Friedlingstein, F Jotzo, DP van Vuuren, and C Le Quéré. Sharing a quota on cumulative carbon emissions. Nature Climate Change, v. 4, p. 873-879 **Cited >300 times**

22. **Davis, SJ** and RH Socolow. Commitment accounting of CO_2 emissions. Environmental Research Letters, v. 9, p. 084018 (*ERL Highlight of 2014* and selected in 2016 as one of ERL's 10th Anniversary *"Ten Milestone Articles"*) **Cited >100 times**

21. **Davis, SJ**, J Burney, J Pongratz, and K Caldeira. Methods for attributing land-use emissions to products. Carbon Management, v. 5, n. 2, p. 233-245

20. Caro, D, **SJ Davis**, S Bastianoni, and K Caldeira. Global and regional trends in greenhouse gas emissions from livestock. Climatic Change, v. 126, p. 203-216. **Cited >100 times**

19. Guan, D, J Lin, **SJ Davis**, D Pan, K He, C Wang, DJ Wuebbles, DG Streets, and Q Zhang. Reply to Lopez et al.: Consumption-based accounting helps mitigate global air pollution. Proceedings of the National Academy of Sciences, v. 111, n. 26, p. E2631

18. Lin, J, D Pan, **SJ Davis**, Y Kuang, Q Zhang, K He, C Wang, D Streets, and D Guan. China's international trade and air pollution in the United States. Proceedings of the National Academy of Sciences, v. 111, n. 5, p. 1736-1741 (*Winner of 2014 Cozzarelli Prize*) **Cited >300 times**

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17. Andrew, R, **SJ Davis**, and GP Peters. Climate policy and dependence on traded carbon. Environmental Research Letters, v. 8, no. 3, p. 034011

16. Feng, K, **SJ Davis**, X Li, D Guan, L Sun, Z Liu, and K Hubacek. Outsourcing CO_2 within China. Proceedings of the National Academy of Sciences, v. 110, p. 11654-11659 **Cited >400 times**

15. Haverd, V., MR Raupach, PR Briggs, JG Canadell, **SJ Davis**, RM Law, CP Meyer, GP Peters, C Pickett-Heaps, and B Sherman. The Australian terrestrial carbon budget. Biogeosciences, v. 10, p. 851-869 **Cited >100 times**

14. **Davis, SJ**, L Cao, K Caldeira, and MI Hoffert. Rethinking wedges. Environmental Research Letters, v. 8, n. 1, p. 011001

2012

13. Peters, GP, **SJ Davis**, and R Andrews. A synthesis of carbon in international trade. Biogeosciences, v. 9, p. 3247-3276 **Cited >200 times**

12. Dickinson, WR, TF Lawton, M Pecha, **SJ Davis**, GE Gehrels, and RA Young. Provenance of the Paleogene Colton Formation (Uinta basin) and Cretaceous–Paleogene provenance evolution in the Utah foreland: Evidence from U-Pb ages of detrital zircons, paleocurrent trends, and sandstone petrofacies. Geosphere, v. 8, p. 854-880

11. Andres, RJ, TA Boden, F-M Breon, P Ciais, **SJ Davis**, D Erickson, JS Gregg, A Jacobson, G Marland, J Miller, T Oda, JGJ Olivier, MR Raupach, P Rayner, and K Treanton. A synthesis of carbon dioxide emissions from fossil-fuel combustion. Biogeosciences, v. 9, p. 1845-1871 **Cited >200 times**

10. Chamberlain, CP, HT Mix, A Mulch, MT Hren, ML Kent-Corson, **SJ Davis**, TW Horton, and SA Graham. The Cenozoic climatic and topographic evolution of the western North American Cordillera. American Journal of Science, v. 312, p. 213-262. **Cited >100 times**

2011

9. **Davis, SJ**, GP Peters, and K Caldeira. The supply chain of CO_2 emissions. Proceedings of the National Academy of Sciences, v. 108, n. 45, p. 18554-18559. See also, http://supplychainCO2.stanford.edu/ **Cited >400 times**

8. Caldeira, K and **SJ Davis**. Accounting for carbon dioxide emissions: A matter of time. Proceedings of the National Academy of Sciences, v. 108, n. 21, p. 8533-8534

2010

7. **Davis, SJ**, D Matthews, and K Caldeira. Future CO_2 emissions and climate change from existing energy infrastructure. Science, v. 329, p. 1330-1335 **Cited >800 times**

6. **Davis, SJ**, WR Dickinson, GE Gehrels, JE Spencer, TF Lawton, and AR Carroll. The Paleogene California River: Evidence of Mojave-Uinta paleodrainage from U-Pb ages of detrital zircons. Geology, v. 38, p. 931-934, doi: 10.1130/G31250.1

5. Burney, J, **SJ Davis**, and DB Lobell. Greenhouse gas mitigation by agricultural intensification. Proceedings of the National Academy of Sciences, v. 107, n. 26, p. 12052-12057 **Cited >900 times**

4. **Davis, SJ** and K Caldeira. Consumption-based accounting of CO_2 emissions. Proceedings of the National Academy of Sciences, v. 107, n. 12, p. 5687-5693 **Cited >1500 times**

2009

3. **Davis, SJ**, HT Mix, BA Wiegand, AR Carroll, and CP Chamberlain. Synorogenic evolution of large-scale drainage patterns: Isotope paleohydrology of sequential Laramide basins. American Journal of Science, v. 309, p. 549-602, doi: 10.2475/07.2009.02

2. **Davis, SJ**, A Mulch, AR Carroll, TW Horton, and CP Chamberlain. Paleogene Landscape Evolution of the central North American Cordillera: Developing topography and hydrology in the Laramide Foreland. GSA Bulletin, v. 121, p. 100-116, doi: 10.1130/B26308.1

1. **Davis, SJ**, BA Wiegand, AR Carroll, and CP Chamberlain. The effect of drainage reorganization on paleoaltimetry studies: An example from the Paleogene Laramide Foreland. Earth and Planetary Science Letters, v. 275, p. 258-268, doi: 10.1016/j.epsl.2008.08.009

Online Publications

2016 — Inman, M, DL Sanchez, MD Mastrandrea, **SJ Davis**, and K Fries. An Unprecedented Push for Low-carbon Energy Innovation. A report published by Near Zero: http://www.nearzero.org/reports/mission-innovation

2014 — Shearer, C, M Inman, and **SJ Davis**. Keystone XL: The Climate Impact: An Expert Elicitation. A report published by Near Zero: http://www.nearzero.org/reports/KXL/

2012 — Inman, M and **SJ Davis**. How Low Will Solar Photovoltaic Prices Go?: An Expert Discussion. A report published by Near Zero: http://www.nearzero.org/reports/pv-learning/

Inman, M and **SJ Davis**. Energy High in the Sky: Expert Perspectives on Airborne Wind Energy Systems. A report published by Near Zero: http://www.nearzero.org/reports/AirborneWind/

2011 — **Davis, SJ**. Department of Energy Funding Priorities: An Expert Discussion. A report published by Near Zero: http://www.nearzero.org/reports/doe-priorities

2009 — **Davis, SJ**, Reducing the Carbon Footprint of Fat Tire® Amber Ale by Changing Agricultural Practices: Potential and Limitations. A report by The Climate Conservancy.

2008 — **Davis, SJ**. The Carbon Footprint of Earthbound Farm® Mixed Baby Greens. A report by The Climate Conservancy.

Davis, SJ. The Carbon Footprint of Fat Tire® Amber Ale. A report by The Climate Conservancy: http://www.ess.uci.edu/~sjdavis/pubs/Fat_Tire_2008.pdf

2007 — **Davis, SJ**, Toward a Product-Level Standard: Life Cycle Analysis of Greenhouse Gas Emissions. The London Accord.

Professional Affiliations

- State Bar of California
- American Association for the Advancement of Science
- American Geophysical Union (Fellow)

Teaching

- ESS 70A Sustainable Energy Systems
- ESS 204 Humans in the Earth System
- ESS 158 Sustainable Systems Analysis
- ESS 100 Climate Solutions (Bending the Curve)
- UPPP H30E Cities: Focal Point for Sustainability Problems and Solutions

- ESS 192 Careers in Earth System Science
- ESS 178 Solving the Carbon-Climate-Energy Problem (*retired*)
- ESS 60C Global Environmental Issues (*retired*)

AWARDS AND GRANTS

2020 Clarivate Analytics Highly Cited Researcher 2020

ClimateWorks Foundation, "Assessing the global potential of macroalgae cultivation." (PI: **SJ Davis**), *$150,000*

Climate Imperative/Energy Innovation Policy and Technology LLC, "State-level Carbon Monitor." (PI: **SJ Davis**), *$100,000*

2019 Clarivate Analytics Highly Cited Researcher 2019

Research Support from Carnegie Institution for Science, (PI: **SJ Davis**), *$170,000*

2018 James B. Macelwane Medal (American Geophysical Union), Conferred AGU Fellow

2017 Ecological Society of America Sustainability Science Award http://www.esa.org/esablog/meetings/esa-2017-annual-meeting/jianguo-liu-2017-sustainability-science-award/

2016 NSF/USDA Innovations at the Nexus of Food, Energy and Water Systems (INFEWS), "Monitoring and managing food, energy, and water systems under stress: The California crucible." (PI: **SJ Davis**), *$2.88M total, $1.88M to UC Irvine:* http://www.nsf.gov/awardsearch/showAward?AWD_ID=1639318

TomKat UC Carbon Neutrality Project, "Reaching the other side of the bridge: Challenges in eliminating natural gas as an energy source" (PI: **SJ Davis**), *$55,000:* https://www.nceas.ucsb.edu/projects/12746#

UC Irvine award for Outstanding Contributions to Undergraduate Education

Alfred P. Sloan Foundation, Does the elicitation mode matter? Comparing different methods for eliciting expert judgment. (PI: Erin Baker, UMass Amherst), *$20,000*

2015 Gordon & Betty Moore Foundation, Funding for Workshop: "Critical Barriers to Progress in Sustainability Science," (PI: **SJ Davis**), *$30,000*

PNAS Cozzarelli Prize

2014 Research Support from Near Zero, (PI: **SJ Davis**), *$100,000*

Research Support from Aspen Global Change Institute, (PI: **SJ Davis**), *$11,000*

2013 NSF Coupled Human and Natural Systems (CHANS) Fellowship*, $1,500*

2012 Research Support from Near Zero, (PI: **SJ Davis**), *$68,276*

SELECTED MEDIA COVERAGE

2020

The Economist, "Coal's endgame: The dirtiest fossil fuel is on the back foot" https://www.economist.com/briefing/2020/12/03/the-dirtiest-fossil-fuel-is-on-the-back-foot

KQED, "California Wildfires Killed 106 People Two Years Ago. Researchers Say the Smoke Killed 3,652," Danielle Venton: https://www.kqed.org/science/1971666/california-wildfires-killed-106-people-two-years-ago-researchers-say-the-smoke-killed-3652

Scientific American, "Why a Historic Emissions Drop from COVID Is No Cause to Celebrate," Ben Storrow: https://www.scientificamerican.com/article/why-a-historic-emissions-drop-from-covid-is-no-cause-to-celebrate/

Huffington Post, "New Study Casts Doubt On The Climate Benefits Of Natural Gas Power Plants," Alexander C. Kaufman: https://www.huffpost.com/entry/gas-bridge-fuel_n_5f7f74f0c5b664e5babb0ea8

WIRED, "In an Odd Twist, Cleaner Air in China May Mean a Warmer Earth," Eric Niiler: https://www.wired.com/story/in-an-odd-twist-cleaner-air-in-china-may-mean-a-warmer-earth/

Nature, "How the coronavirus pandemic slashed carbon emissions – in five graphs," Jeff Tollefson: https://www.nature.com/articles/d41586-020-01497-0

The New York Times, "For richer or poorer: coronavirus, cheap oil test climate vows," Reuters: https://nyti.ms/3cUiFrB

2019

The New Yorker, "Is Nuclear Power Worth the Risk?," Carolyn Kormann: https://bit.ly/2Ncnl12

All Things Considered (NPR), "Global Carbon Emissions Continue To Rise Despite Efforts To Cut Them," Ailsa Chang: https://n.pr/2LmsmlU

National Geographic, "We have too many fossil-fuel power plants to meet climate goals," Stephen Leahy: https://on.natgeo.com/320Ovxw

Los Angeles Times, "To meet Paris climate targets, some power plants may need to take an early retirement," Julia Rosen: https://lat.ms/2LyyskH

MIT Technology Review, "We've already built too many power plants and cars to prevent 1.5 ˚C of warming," James Temple: https://bit.ly/2J0IvgG

2018

Scientific American, "Trouble Brewing? Climate Change Closes In on Beer Drinkers," Angus Chen: https://goo.gl/8fGP3L

Associated Press, "Global warming to leave us crying in our costlier beer," Seth Borenstein: https://goo.gl/zN9J2r

New York Times, "You've Heard of Outsourced Jobs, but Outsourced Pollution? It's Real, and Tough to Tally Up," Brad Plumer: https://goo.gl/oMqVeH

MIT Technology Review, "At this rate, it's going to take nearly 400 years to transform the energy system," James Temple: https://goo.gl/gMkmPh

2017

New York Times, "India's Rising Temperatures Are Already Deadly, Study Shows," Katy Daigle: https://apnews.com/cd86d634c5e54902b5fbe4a1404c6beb

Carbon Brief, "India's planned coal plants could 'single-handedly jeopardise' 1.5°C target," Jocelyn Timperly: https://goo.gl/93EcGG

Scientific American, “India's Energy Landscape Is Rapidly Changing,” Kavya Balaraman: https://goo.gl/lcxPSR

The Economist, “Airborne particles cause more than 3m early deaths a year,”: https://goo.gl/Poiyk8

Associated Press, “Dirty air from global trade kills at home and abroad,” Seth Borenstein: https://goo.gl/vdK4v6

USA Today,”How your cheap Chinese-made products may be killing thousands in China,” Traci Watson: https://goo.gl/9Xp6sK

New Scientist, “Western demand for goods from China is killing 100,000 a year,” Chelsea Whyte: https://goo.gl/t06mbE

The Guardian, “Thousands of pollution deaths worldwide linked to western consumers – study,” Hannah Devlin: https://goo.gl/atp5nV

2016 Architect Magazine, “Concrete as a Carbon Sink?,” Blaine Brownell: https://goo.gl/BMiV6B

Science, “Cement soaks up greenhouse gases,” Warren Cornwall: https://goo.gl/h6UmNf

New York Times, “Today’s Energy System Could Blow Paris Climate Goals,” Karl Ritter: https://goo.gl/YyGFNx

New York Times, “Scientists Just Say No to ‘Chemtrails’ Conspiracy Theory,” Henry Fountain: http://goo.gl/tn2slI

Forbes, “Scientists Published An Article On ‘Chemtrails’ (They Aren’t Real),” David DiSalvo: http://goo.gl/jO2mSq

Motherboard (Vice), “Annoyed Scientists Publish Study on Chemtrail Conspiracy Theories,” Sarah Emerson: http://goo.gl/IUtgFQ

USA Today, “Scientists disprove airplane ‘chemtrail’ theory,” Mary Bowerman: http://goo.gl/M5hE9q

NPR, *Marketplace*, “Can you grow the economy without adding pollution?” Scott Tong: http://goo.gl/2BPcb5

2015 Climate Central, “Geoengineering a ‘Risky’ Bet, Scientists Warn Negotiators” John Upton: http://goo.gl/KWumMV

NPR, *Marketplace,* “Shell pulls out of Arctic. For how long?”: http://goo.gl/wswu1O

Scientific American, “Cheap Goods from China Have High Carbon Cost” Christopher Intagliata: http://goo.gl/kSCbP0

Sinosphere (New York Times blog), “China’s Exports Are Closely Linked to Its Emissions,” Chris Buckley: http://goo.gl/74Xqx8

New York Times, “China’s Carbon Dioxide Emissions May Have Been Overstated by More Than 10%,” Chris Buckley: http://goo.gl/b4CqmP

Scientific American, “How Far Does Obama's Clean Power Plan Go in Slowing Climate Change?” David Biello: http://goo.gl/TTrvuG

National Geographic, “Climate Mission Impossible: Scientists Say Fossil Fuels Must Go Untapped,” Christina Nunez: http://goo.gl/le7JvT

2014 Scientific American, “Natural Gas Offers Little Benefit in Fight against Global Warming,” Gayathri Vaidyanathan: http://goo.gl/w8LWOQ

Science, “Abundant natural gas may do little to reduce U.S. emissions, study suggests,” Aleszu Bajak: http://goo.gl/6A62g0

The Washington Post, “Natural gas won’t save us from global warming, study confirms,” Max Ehrenfrund: http://goo.gl/4tHZYf

National Geographic, “New Reports Offer Clearest Picture Yet of Rising Greenhouse Gas Emissions,” Brian Clark Howard: http://goo.gl/CRpdXw

Dot Earth (New York Times blog), “Accounting for the Expanding Carbon Shadow from Coal-Burning Plants,” Andrew Revkin: http://nyti.ms/1tHvhqt

National Geographic, “Tons of emissions from power plants are already locked in, study says,” Joe Eaton: http://goo.gl/CrGIVt

Science, “Time to focus on committed, not current, carbon emissions, study argues,” Eli Kintisch: http://goo.gl/mYGuVG

Washington Post, “Beef pollutes more than pork, poultry, study says,” Seth Borenstein: http://wapo.st/1lmPXgA

Los Angeles Times, “Climate scientists have a beef with beef,” Geoffrey Mohan: http://fw.to/Sb7iSmR

Wall Street Journal, “U.S. Consumers Contribute, Not a Little, to Chinese Air Pollution,” Brian Spegele, http://on.wsj.com/1fansUR

Washington Post, “Study: Pollution from Chinese factories is harming air quality on U.S. West Coast,” William Wan: http://wapo.st/1eNDP3P

NPR, *Marketplace*, “American pollution: Made in China”: http://bit.ly/1kSNaj0

The Atlantic, “How the Western World Enables China's Air Pollution,” John Metcalfe: http://bit.ly/1jDhElQ

Los Angeles Times, “China's industry exporting air pollution to U.S., study says,” Tony Barboza: http://lat.ms/1h2YdRH

2013 Washington Post, “China is testing out cap-and-trade—but will it actually work?” Brad Plumer: http://wapo.st/1nL7wbb

Science, “Climate Study Highlights Wedge Issue,” v. 339, no. 6116, pp. 128-129: http://www.sciencemag.org/content/339/6116/128

Nature Climate Change, “Policy: Carbon emissions in China’s trade,” v. 3, pp. 703-704: http://bit.ly/Mamrzi

The Guardian, “China’s rich provinces outsource emissions to less developed areas,” Suzanne Goldenberg: http://bit.ly/1j95hy6

BBC, ”China outsources carbon emissions to poorer areas,” Melissa Hogenboom: http://bbc.in/1mrM0Nd

VICE, “Human Society Must Reduce Carbon Emissions to ‘Near Zero’ by 2060 or Face Catastrophic Climate Change,” Brian Merchant: http://bit.ly/1gffEOh

2012 NPR, *EarthFix*, “Counting Up Coal’s CO_2,” Ashley Ahearn: http://bit.ly/1jDRhfA

2011 The Guardian, “Groundbreaking data tracks carbon emissions back to their source,” Duncan Clark: http://bit.ly/1ht0M3Z

BBC, “Carbon: What price simplicity?,” Richard Black: http://bbc.in/1cndoW2

Nature Climate Change, “Attributing carbon emissions,” v. 1, p. 442: http://bit.ly/1e59kpU

2010 New York Times, “Counting ‘Outsourced’ Greenhouse Gas Emissions,” John Broder: http://nyti.ms/1gfg479

The Economist**,** “Trading Down: Industry’s move from the rich to the poor world is confusing the carbon accounts,” http://econ.st/1j948qd

NPR, *All Things Considered***,** “For Developing Nations, Exports Boost CO_2 Emissions,” Richard Harris: http://n.pr/1feoVbd

TIME Magazine, “When Goods Get Traded, Who Pays for the CO2?” Bryan Walsh: http://ti.me/1gSvrob

Wired Magazine, “Carbon Emissions Not at Doomsday Level…Yet,” Lisa Grossman: http://wrd.cm/1m6Wo9p

TIME Magazine “Industrial Farming Slows Climate Change?” Bryan Walsh: http://ti.me/1bj6X7Y