Annotated List of About 50 Books on Sustainability/Climate Change November 2020 update Susan Schneider Download at www.scienceofconsequences.com

Particularly Recommended Recent Books

Hawken, Paul. (Ed). 2017. *Drawdown*. Penguin. Outstanding, comprehensive climate change blockbuster. Detailed global analysis of 100 methods of all sorts that can help us avert climate catastrophe, ranked quantitatively in order of likely impact. Great, inspiring examples from across the globe. A don't-miss for anyone who cares in the slightest.

DeMocker, Mary. 2018. The Parents' Guide to Climate Revolution: 100 Ways to Build a Fossil-Free Future, Raise Empowered Kids, and Still Get a Good Night's Sleep. New World. Not just for parents. Magnificent! Manages to be upbeat, innovative, and inspiring while fully accepting how little time we have left to confront the climate change challenge. No wonder Yale Climate Connections and many others love it (including everyone I've recommended it to). Whether you have kids or not, this fun-to-read book motivates and informs, with a wide range of wonderful suggestions. And we seem to have read many of the same climate change books. :-) If everyone acted on it, we have a real shot at avoiding catastrophe. This is the book we make available at our climate coalition events.

Johnston, Nicholas, & Parzen. 2013. *The Guide to Greening Cities*. Island Press. Superb, in-depth presentation of what has worked, written by the same people who helped transform Chicago, Vancouver, and other large cities. Two of the authors helped co-found the Urban Sustainability Directors Network, and the first chapter, detailing the challenges and accomplishments of one of them, is a great start. Lots of concrete examples for every aspect of sustainability, plus most chapters end with case studies. Inspiring but focused on the practical: What elements were critical for success? How were the many barriers to sustainable change overcome? Delves into the details, including not just strategies and social marketing but performance management and the critical area of financing. Shows multiple pathways to a specific outcome. Good psychology throughout: Change can be hard, but emphasizing its positive side (e.g., many cost savings) makes it an easier sell. Metrics were critical. An awesome resource for everyone trying to support greener cities. You will be convinced they can lead the way to a sustainable and equitable future.

Wallace-Wells, David. 2019. *The Uninhabitable Earth: Life After Warming*. Penguin. Deservedly a bestseller: extremely insightful and well done, but also the ultimate in terrifying. Do read this, but maybe in small doses (that's how I managed). Never use Bitcoin, by the way. A quote that hit home: "That climate change demands expertise, and faith in it, at precisely the moment when public confidence in expertise is collapsing, is one of its historical ironies" (p. 160). BUT – if we accept responsibility and move faster, it's not too late. There is some good news, just not enough.

Goodell, Jeff. 2017. *The Water Will Come*. Little, Brown. Outstanding. Well researched, beautifully written, nuanced. How are developed & developing nations coping with current sea level rise and planning for more? - or not, in some cases, as Goodell devastatingly describes. As usual, follow the money. Europe provides some success stories.

Bourne, Joel. 2015. The End of Plenty: The Race to Feed a Crowded World. Norton. Comprehensive in scope, including the technical side of agricultural research, population demographics, and economics (for example, the role of free trade and Wall Street speculation in food shortages in developing nations). Lots of great international examples, both hopeful (SRI - system of rice intensification) and discouraging. Almost 2 billion are undernourished now, with more predicted, and global warming is already a significant problem. Malthus comes to mind, and Bourne gets him right as a humanitarian who hoped people would be adaptable enough to achieve sustainability. The jury is still out.

Harvey, Hal. 2018. Designing Climate Solutions: A Policy Guide for Low-Carbon Energy. Island Press. Very thorough: Everything you could want to know about the policy-based solutions to climate change – and policy is the big lever. Look what California has accomplished, and the other nations and states that are leading the way in reducing greenhouse gas emissions. Performance standards that continually increase are one of many evidence-based recommendations. Time-tested, with lots of the details that have made the difference between success and failure. All broken down carefully and specifically by sector. "... the grid could run reliably and at the same cost as in 2013 on more than 50 percent wind and solar generation, reducing greenhouse gas emissions by 80 percent from 2005 levels ..." (p. 113). A hopeful book, but the policy changes actually need to get made.

Humes, Edward. 2016. Door to Door: Magnificent, Maddening, Mysterious World of Transportation. Harper. Really impressive reach - freight, shipping, ports, robotic cars . . . The down side of fast shipping (avoid Amazon Prime). Covers congestion now, the carnage on the streets that we take for granted (pedestrians beware), the gross inadequacy of the US gas tax, all the ins and outs. An American dies in a car accident every 15 minutes . . . Life cycle analyses for transport of everyday items are eye-opening. Also the harm done by SUVs. Lots of interesting facts, and – overall - a hopeful book (NYC is a success story in some surprising ways). Moving to electric vehicles is absolutely critical, and I'm proud to say I have done so! For those interested, UC Davis professor Dan Sperling's more technical and focused Three Revolutions: Automated, Shared, and Electric Vehicles to a Better Future (2018) is great too. Everything you'd want to know about autonomous vehicles, for example. EVs aren't enough; amping up all the forms of ride-sharing is absolutely critical (once we get through coronavirus, that is).

Rich, Nathaniel. 2019 Losing Earth: A Recent History. Farrar. During 1979-89 the world almost got international climate action. Covers unfamiliar history as well as brief summaries of well-known incidents like James Hansen's Congressional testimony (& events have shown that he nailed it). John Sununu emerges as one of the villains, along of course with a fossil fuel industry that almost chose an ethical route rather than its disastrously successful disinformation campaign. Outstanding, short, reads like a novel. A dystopia, sadly. But maybe seeing where we went wrong can help us now?

Klinenberg, Eric. 2002/2015. *Heat Wave: A Social Autopsy of Disaster in Chicago* (2nd ed). U Chicago. Magnificent. A sociologist's comprehensive critique of the conditions leading to the 1995 Chicago heat wave tragedy in which hundreds died, often alone. Thorough and detailed, exploring government, politics, media, community, SES, race, gender, economics. Very readable too.

Nuccitelli, Dana. 2015. Climatology versus Pseudoscience: Exposing the Failed Predictions of Global Warming Skeptics. Praeger. Excellent summary of climate change models over the years and how

their predictions have held up. Data-based refutations of the contrarians, as the author calls deniers. Also excellent on problems with "false balance" in the media - giving disproportionate attention to contrarians long after their specific claims had been scientifically refuted. Behind-the-scenes in some cases, as Nuccitelli himself was a leading author on one of the high-impact papers reexamining the extent of the anthropogenic climate change consensus among climate scientists, and confirming the earlier 97% figure. I am honored to know Dana, who blogs for Yale Climate Connections, my favorite e-newsletter.

General List Carbon Footprint and Energy Basics

Owen, David. 2009. *Green Metropolis: Why Living Smaller, Living Closer, and Driving Less are the Keys to Sustainability.* Excellent. Gets the anti-sprawl message out effectively, highlighting the benefits of high-density cities like New York – which has achieved one of the lowest US per-capita greenhouse gas emissions levels. (Not so good for coronavirus, sadly.) Recommended.

Berners-Lee, Mike. 2011. How Bad are Bananas: The Carbon Footprint of Everything. Euro-centric and already somewhat outdated, and I question a few of his assessments. That said, this great book does something really important: look at the GHG impact of all sorts of human activities, while recognizing the complexities in trying to generate even ballpark figures. His order of magnitude categorization is useful, as is his understanding of the nuances. A book full of humor despite the content - impressive to pull that one off. Berners-Lee succeeds with the critical goal of focusing on behavior changes that have a significant impact, and not dwelling on the small stuff too much. For example, boat transport for produce/goods is cheap & CO2 friendly. So local doesn't always win (even if it's still usually a good idea), and bananas are fine (in case you were wondering!).

Henson, Robert. 2011. *Rough Guide to Climate Change* (3rd ed.). Comprehensive; makes the technical details understandable. Lots of graphs and charts. Addresses climate change deniers directly in a tactful, nonconfrontational way.

Union of Concerned Scientists. 2012. *Cooler & Smarter: Practical Steps for Low-carbon Living*. Answers that question, how can *I* make a difference in my daily life? Thorough and clear, well-written.

Kalmus, Peter. 2017. Being the Change: Live Well and Spark a Climate Revolution. A climate scientist with a wife and two children cut his family's carbon footprint drastically in innovative ways, and is loving the change. Some of the recommendations are not for everyone – raising chickens? – but they're inspiring.

Leonard, Annie. 2011. The Story of Stuff: How Our Obsession with Stuff is Trashing the Planet. Already a classic. Life-cycle analyses of consumer goods and the down sides of materialism in developed nations, particularly the US. Eye-opening investigative work, pulled off with a sense of humor as well as urgency.

MacKay, David. 2009. *Sustainable Energy - Without the Hot Air.* One of the more technical guides for lay audiences. Provides a helpful analysis of just what's necessary to leave fossil fuels behind. Euro-centered, but lots for North America and the rest of the world too. Getting a little outdated, but so good I've left it in. MacKay lived his values, and died tragically young a couple years ago.

Helm, Dieter. 2017. *Burn-Out: The Endgame for Fossil Fuels*. Yale U. Excellent. Good graphs; the global economics of energy in the next 50 years; historically informed. Electricity as the future, with a smart systems basis. Natural gas as the transition fossil fuel in his view (this is controversial), and what that means.

Royte, Elizabeth. 2011. *Bottlemania: Big Business, Local Springs, and the Battle over America's Drinking Water*. You'll never buy bottled water again! An important book. Well documented, yet an engaging read, albeit a frustrating one.

Bigger Picture/Economics

Klein, Naomi. 2015. This Changes Everything. Makes the case for systemic modifications in the Western approach to the economics of climate change, particularly in the US. I had some issues with parts of it, but consider it a worthwhile, thought-provoking read.

Klein, Naomi. 2019. On Fire: The (Burning) Case for a Green New Deal.

Klein, Naomi. 2017. No is Not Enough.

Follow-ups to *This Changes Everything*. Updates and historical comparisons. The criticism of insufficiently-regulated US-style capitalism continues: From *On Fire*, "There is simply no way to square a belief system that vilifies collective action and venerates total market freedom with a problem that demands collective action on an unprecedented scale and a dramatic reining in of the market forces that created and are deepening the crisis." (p. 70) Fun fact: During WWII, citizens' Victory Gardens provided over 40% of produce consumed in the US.

And for a counterweight to Klein,

Jaccard, Mark. 2020. *Citizen's Guide to Climate Success*. Insightful. A Canadian academic, economist Jaccard spent years in charge of British Columbia's utilities commission, and helped design its carbon tax and clean energy standard. He's seen the vicious politics and misinformation campaigns threatening these gains. Outcome: Anything perceived as a "tax" is a political loser, while flexible regulations and cap-and-trade are more acceptable. Working with sincerely concerned politicians is critical, focusing on electricity and transportation. Jaccard is sincere himself, to the point of spending a few civil disobedience hours in jail for a coal train demonstration – impressive! But he considers Klein's approach too extreme. While his chapter on behavior change is not ideal (my view, my area), this is an impressive, well-thought-out book and an engaging read as well.

Oreskes, Naomi & Erik Conway. 2012. *Merchants of Doubt*. Masterful investigative report documenting deliberate media campaigns of lies by the tobacco industry and then the fossil fuel industry – casting public doubt on established science even as internal documents show that the

science was actually acknowledged by these large corporations. Often using the same legal and marketing teams.

Burt, Justine. 2019. *The Great Pivot: Creating Meaningful Work to Build a Sustainable Future*. Excellent, with a very practical focus on shifting the US economy. Benefits are emphasized, but downsides, such as job losses in old-economy areas, need to be offset by green jobs and training. A nice summary and handbook, with many useful tables and graphs. Includes costs (e.g., for bike infrastructure) and means of financing. Includes current transportation sustainability apps — I can't keep up with them all! Burt has her own consulting firm and it shows.

Pettifor, Ann. 2019. The Case for the Green New Deal. Excellent. Laser-focused on the financial side (so be prepared for occasional heavy wading; it's short and that helps). Monetary and fiscal policy – the arcane financial workings of our modern world, private vs public savings and debt, and the history with its ups and downs, heroes and villains. Lots of detail. If we don't get this right, we won't be able to make change that's fast enough and large enough. Pettifor notes how critical it is to target the industries and people with the highest carbon footprints. Includes some coverage of environmental justice for the Global South and the poor in the North.

Friedman, Thomas. 2009. *Hot, Flat, and Crowded*. Farrar, Strauss. Excellent, thoughtful; includes economic analyses. Policy decisions with lots of incentives are critical. Recommended.

Berners-Lee, Mike. 2019. There Is No Planet B. Excellent, if not quite the standout as his How Bad Are Bananas. Very broad in scope, including not just food, energy, transport – the usual suspects – but even a discussion of the importance of a more equitable income distribution. A highlight is a statement on what we're aiming for ultimately with sustainability: a clean environment, and healthy, long lives for everyone, with restored biodiversity, less violence, more trust and collaboration in a global community that respects everyone's rights.

Solomon, Steven. 2010. Water: The Epic Struggle for Wealth, Power, & Civilization. Really terrific! Traces the ancient history of human water use to the present; water wars go back to the beginning. Comprehensive, carefully researched. One of the most impressive books I read in 2018. Manages to be a page-turner, too. From my local knowledge, Solomon gets California's water challenges right. Don't miss this one.

Weisman, Alan. 2013. *Countdown: Our Last, Best Hope for a Future on Earth?* Another standout. Like *End of Plenty*, addresses the critical 21st century issues of sustainability and global warming, rising food insecurity and population pressure. Also, like Bourne's book, includes reasons for hope. Thorough, evidence-based, lots of international examples, well-written. Recommended.

Balmford, Andrew. 2012. Wild Hope: On the Front Lines of Conservation Success. Inspiring. Like Countdown and End of Plenty, presents lots of international examples, but Balmford focuses on biodiversity conservation. Examining the incentives for all involved parties can lead to win-win solutions for people and animals alike. "You never motivate anybody by just giving them bad news, you have to give them a reason for thinking that things can improve and that their actions can change what might happen." And indeed they can. I cited Balmford's work in my own book.

Turner, Chris. 2012. The Leap: How to Survive and Thrive in the Sustainable Economy. Sustainability hopes examined in depth, good news and bad. "The mainstream of of food production . . . remains committed to a system of industrial monocrops grown in artificially over-fertilized soil, kept alive by petrochemical pesticides, tended, harvested and distributed by an oil addicted processing system, and maintained by a vast web of perverse subsidies. This is a fundamentally unsustainable food production system, a sort of cheap food bubble propped up by low-cost fossil energy" (p. 276). But I emphasize the many causes for hope Turner provides, and we need that. Impressive, thought-provoking.

Hill, Alice & Martinez-Diaz, Leonardo. 2020. *Building a Resilient Tomorrow: How to Prepare for the Coming Climate Disruption*. Excellent, focus on resilience - and solutions. Includes markets, legal approaches, novel finance & insurance mechanisms, relocation vs in-place resilience, climate refugees & immigration, data accessibility, inequality, national security, and health implications. Practical examples from policy wonks who know how to make change happen.

Smith, Laurence. 2011. *The World in 2050: Four Forces Shaping Civilization's Northern Future.* Global warming isn't all bad news . . . Sheds light on unexpected changes, such as the increased difficulty of land travel in the far north due to thawing "permafrost." Reminds us that we *need* a whole-planet perspective for something as complex as global warming.

Briefly

Nesbit, Jeff. 2018. This is the Way the World Ends: How Droughts, and Die-Offs, Heat Waves and Hurricanes Are Converging on America. Overall - good. Covers a lot of scary ground, includes interviews.

Rush, Elizabeth. 2018. *Rising: Despatches from the New American Shore*. What to do when your house is in a flood zone during this era of rising sea levels? What happens to your neighborhood? And how does socioeconomic status influence the outcomes? (Hint: quite a bit.) Rush focuses on the poor and middle class, in a poetic elegy on environmental injustice and (sometimes) resilience. But the human stories resonate most powerfully. Includes the challenges of getting these interviews.

Owen, David. 2017. Where the Water Goes. Colorado River system under threat. Excellent.

Mann, Michael, & Toles, Tom, cartoonist. 2016. *The Madhouse Effect: How Climate Change Denial Is Threatening Our Planet, Destroying Our Politics, and Driving Us Crazy.* Short & sweet - an accessible, very nontechnical summary of the problem of climate change denial. Good cartoons.

Stoknes, Per. 2015. What We Think About When We Try Not to Think about Global Warming: Toward a New Psychology of Climate Action. Mixed, from my point of view as a behavioral psychologist . . . but good in many ways.

Minter, Adam. 2015. *Junkyard Planet: Travels in the Billion-Dollar Trash Trade*. The recycling side of sustainability. Well done, and global indeed in scope.

Minter, Adam. 2019. *Secondhand*. Again, really impressive - global reuse markets rather than recycling. Fascinating, with many unexpected twists as Minter digs deep into where used stuff goes. Goodwill is just the beginning, and how. More important for sustainability than recycling, with "reduce" being the prime directive, of course!

Funk, McKenzie. 2014. Windfall: The Booming Business of Global Warming. Is this good or bad? It depends . . . Fascinating examples. Recommended.

Marshall, George. 2014. Don't Even Think About It: Why Our Brains are Wired to Ignore Climate Change. Good in many ways, but misses some important elements, such as behavior analysis/basic learning principles (my area!) and some behavioral economics. Good on reviewing lots of psych/cognitive info and reaching out to conservatives.

Marshall, George. 2007. *Carbon Detox: Your Step-by-step Guide to Getting Real about Climate Change*. A brilliant book, but very Brit-focused, so I've put it here; it's also showing its age in a few places, although most of it is still applicable. I loved the humor, the strikingly effective non-climate change comparisons, the comprehensiveness, the great suggestions, and the consistently positive approach. Good psychology.

McKibben, Bill. 2014. *Oil & Honey*. Also 2011 *Eaarth: Making a Life on a Tough New Planet*. The old campaigner, founder of 350.org. Both are worthwhile.

Gore, Al. 2017. *An Inconvenient Sequel*. Excellent – an easy read with lots of graphics, yet covers the basics and inspires with great examples.

Lappe, Anna. 2010. Diet for a Hot Planet: The Climate Crisis at the End of Your Fork and What You Can Do About It. Bloomsbury. Excellent! The title may be a bit misleading, as the book mainly covers agricultural and food politics, not individual dietary choices. How can our food supply system achieve sustainability? What powerful ag interests have been preventing progress? Includes inspiring success stories; it's not all bad news.

Fothergill, Scholey, & Pearce 2019. *Our Planet*. The accompaniment to Netflix's series, narrated by David Attenborough. More than just a beautiful coffee table book with many illustrations from the series. Lots of substance here in the form of global information, data summaries, and useful figures (e.g., the world's current and potential forests, the world's dead zones). Very readable.

Figueres, C & Rivett-Carnac, T 2020. *The Future We Choose: Surviving the Climate Crisis*. The authors were in charge of the 2015 Paris climate agreement process. A short summary of where we are, strongest on visualizing what the future could look like if we do take action.

Marsa, Linda. 2013. Fevered. Public health implications of climate change.

Freinkel, Susan. 2011. *Plastic: A Toxic Love Story*. Thorough, thoughtful, and beautifully written. From the early history, the good, the bad, and the ugly. "Extended Producer Responsibility" is critical

to "green" this commodity in all its many forms. Interesting fact: Sometimes petroleum-based plastic is biodegradable and plant-based forms aren't.

Nordhaus, William. 2013. *Climate Casino*. Yale U. From the Nobel Prizewinner, one of the early climate change leaders. Not as impressive as I'd expected (maybe it's me) but still worth a look.

Pernick, Ron & Clint Wilder. 2012. *Clean Tech Nation: How the U.S. Can Lead in the New Global Economy.* The hopeful side of new technology.

Cullen, Heidi. 2011. The Weather of the Future. Climate models and implications. Good.

Norgaard, Kari. 2011. Living in Denial: Climate Change, Emotions, & Everyday Life. An American sociologist lived in a Norwegian town for a year in 2000-01. Despite understanding climate change, the inhabitants did not change their behavior much. Why not? Lessons for us all.

Andrews, Cecile, & Urbanska, Wanda (Eds.). 2009. Less is More. Voluntary simplicity. Excellent group of essays!

Lynas, Mark. 2008. Six Degrees – updated as of 2020: Our Final Warning: Six Degrees of Climate Emergency. (I haven't been able to read the update yet but I'm sure it's good.) 2008 version: Good layout of the different (& tragic) outcomes resulting from different levels of global warming, from 1 to 6 degrees C. Includes some positive outcomes.