

Reference Material for: The Global Climate Predicament

by Daniel Whittingstall

<http://dgrnewsservice.org/2013/03/06/daniel-whittingstall-the-global-climate-predicament/>

To all who have expressed interest in more information with regards to the conclusions in my paper 'The Global Climate Predicament' I hope to address your questions and concerns here. Below is a list, which I hope covers the vast majority of interest, with links to peer reviewed scientific research, reports, articles, books and websites which I used to come to my conclusions and that are pertinent to issues raised. If I have not addressed the topic entirely to your specific concerns then please feel welcome to contact me again with further detailed inquiry. As I am wholly compiling and providing this information on a volunteer bases of my time I would like to ask for your patience and respect.

As some of these published works below were acquired behind pay walls I am only able to provide written reference to them. If you have found alternative avenues to access copies of these works please don't hesitate to pass them along to others who have expressed interest. If you find any of the links to be broken or they have sent you to works that are not specific to the labeled title please notify me and I will make the necessary corrections. Also, if anyone has more up to date information or anything to add to this list please feel free to send me any relevant links. Thank you, and happy reading.

Sincerely,
Daniel Whittingstall

Papers and Reports

Analysing the greenhouse gas emission reductions of the mitigation action plans by non-Annex I countries by 2020

Elzen et al. (2013)

<http://www.sciencedirect.com/science/article/pii/S0301421513000426>

Surface exposure to sunlight stimulates CO₂ release from permafrost soil carbon in the Arctic
Cory et al. (2013)

<http://www.pnas.org/content/early/2013/02/05/1214104110.full.pdf>

A Reconstruction of Regional and Global Temperature for the Past 11,300 Years

Marcott et al. (2013)

<http://www.sciencemag.org/content/339/6124/1198.abstract?sid=574edc78-2eb7-4b18-91c2-db223cde68c6>

Bounding the role of black carbon in the climate system: A scientific assessment

Bond et al. (2013)

<http://chemtrailsplanet.files.wordpress.com/2013/01/jan-2013-bounding-the-role-of-black-carbon-in-the-climate-system.pdf>

A probabilistic quantification of the anthropogenic component of twentieth century global warming

Wigley, Santer. (2013)

<http://link.springer.com/article/10.1007%2Fs00382-012-1585-8>

Federal Advisory Committee Draft Climate Assessment Report Released for Public Review
National Climate Assessment and Development Advisory Committee. (2013)

<http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-fulldraft.pdf>

CryoSat-2 estimates of Arctic sea ice thickness and volume

Laxon et al. (2013)

<http://onlinelibrary.wiley.com/doi/10.1002/grl.50193/abstract>

Increase in observed net carbon dioxide uptake by land and oceans during the past 50 years

Ballantyne et al. (2012)

<http://www.nature.com/nature/journal/v488/n7409/full/nature11299.html>

Activation of old carbon by erosion of coastal and subsea permafrost in Arctic Siberia

Vonk et al. (2012)

[http://www.nature.com/nature/journal/v489/n7414/full/nature11392.html?](http://www.nature.com/nature/journal/v489/n7414/full/nature11392.html?WT.ec_id=NATURE-20120906)

[WT.ec_id=NATURE-20120906](http://www.nature.com/nature/journal/v489/n7414/full/nature11392.html?WT.ec_id=NATURE-20120906)

Can a collapse of global civilization be avoided?

Ehrlich (2012)

<http://rspb.royalsocietypublishing.org/content/280/1754/20122845.full.pdf>

State of the Climate in 2011

Blunden et al. (2012)

<http://www1.ncdc.noaa.gov/pub/data/cmb/bams-sotc/climate-assessment-2011-lo-rez.pdf>

Tipping Elements in the Arctic Marine Ecosystem

Duarte et al. (2012)

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3357823/pdf/13280_2011_Article_224.pdf

Global warming preceded by increasing carbon dioxide concentrations during the last deglaciation

Shakun et al. (2012)

<http://sciences.blogs.liberation.fr/files/shakun-et-al.pdf>

Perceptions of Climate Change: The New Climate Dice

Hansen et al. (2012)

“Stabilizing climate with conditions resembling those of the Holocene, the world in which civilization developed, can only be achieved if rapid reduction of fossil fuel emissions begins soon.”

http://www.columbia.edu/~jeh1/mailings/2012/20120105_PerceptionsAndDice.pdf

2020 emissions levels required to limit warming to below 2 °C

Rogelj et al. (2012)

“Global emissions would therefore have to peak and decline before the end of this decade.”

<http://xa.yimg.com/kq/groups/18383638/586457376/name/nclimate1758.pdf>

The Paleocene–Eocene thermal maximum (PETM) in shallow-marine successions of the Adriatic carbonate platform (SW Slovenia)

Zamagni et al. (2012)

<http://gsabulletin.gsapubs.org/content/124/7-8/1071.abstract>

Significant contribution to climate warming from the permafrost carbon feedback

MacDougall et al. (2012)

<http://www.see.ed.ac.uk/~shs/Climate%20change/Climate%20model%20results/Permafrost%20full.pdf>

Recent changes to the Gulf Stream causing widespread gas hydrate destabilization

Phrampus, Benjamin. (2012)

http://www.nature.com/nature/journal/v490/n7421/full/nature11528.html?WT.ec_id=NATURE-20121025

Multistability and critical thresholds of the Greenland ice sheet

Robinson et al. (2012)

<http://www.nature.com/nclimate/journal/v2/n6/full/nclimate1449.html>

Greenland ice sheet albedo feedback: thermodynamics and atmospheric drivers

Box et al. (2012)

<http://www.the-cryosphere-discuss.net/6/593/2012/tcd-6-593-2012.pdf>

Climate Change: The Evidence and Our Options

Lonnie, Gioietta. (2012)

<http://connection.ebscohost.com/c/articles/79683522/climate-change-evidence-our-options>

WMO Greenhouse Gas Bulletin: The State of Greenhouse Gases in the Atmosphere Based on Global Observations through 2011

World Meteorological Organization. (2012)

http://www.wmo.int/pages/mediacentre/press_releases/documents/GHG_Bulletin_No.8_en.pdf

Turn Down The Heat: Why a 4° C Warmer World Must Be Avoided

Potsdam Institute for Climate Impact Research and Climate Analytics. (2012)

<http://climatechange.worldbank.org/sites/default/files/>

[Turn_Down_the_heat_Why_a_4_degree_centigrade_warmer_world_must_be_avoided.pdf](http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centigrade_warmer_world_must_be_avoided.pdf)

Trends in Global CO₂ Emissions 2012 report

Olivier et al. (2012)

<http://edgar.jrc.ec.europa.eu/CO2REPORT2012.pdf>

The Case for Young People and Nature: A Path to a Healthy, Natural, Prosperous Future

Hansen et al. (2011)

“Governments must act immediately to significantly reduce fossil fuel emissions to protect our children's future and avoid loss of crucial ecosystem services, or else be complicit in this loss and its consequences.”

http://www.columbia.edu/~jeh1/mailings/2011/20110505_CaseForYoungPeople.pdf

Amount and timing of permafrost carbon release in response to climate warming

Schaefer et al. (2011)

<http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0889.2011.00527.x/abstract>

Global temperature evolution 1979–2010

Grant Foster, Stefan Rahmstorf. (2011)

http://iopscience.iop.org/1748-9326/6/4/044022/pdf/1748-9326_6_4_044022.pdf

Regime shifts in ecological systems can occur with no warning

Hastings et al. (2010)

http://www.com.univ-mrs.fr/~boudouresque/Master_Oceanographie_Biologie_Ecologie_Marine/Publication_Hastings_et_Wysham_2010_Ecol_Lett.pdf

The Impact of Global Warming on Marine Boundary Layer Clouds over the Eastern Pacific—A Regional Model Study

Lauer et al. (2010)

<http://journals.ametsoc.org/doi/pdf/10.1175/2010JCLI3666.1>

The effect of more realistic forcings and boundary conditions on the modelled geometry and sensitivity of the Greenland ice-sheet

Stone et al. (2010)

<http://www.the-cryosphere.net/4/397/2010/tc-4-397-2010.pdf>

Extensive Methane Venting to the Atmosphere from Sediments of the East Siberian Arctic Shelf

Shakhova et al. (2010)

<http://files.instrument.com.cn/FilesCenter/20100607/SH101432-133263.pdf>

A safe operating space for humanity

Rockström et al. (2009)

<http://www.environment.arizona.edu/files/env/profiles/liverman/rockstrom-etc-liverman-2009-nature.pdf>

The Copenhagen Diagnosis, 2009: Updating the World on the Latest Climate Science.

Allison et al. (2009)

http://www.cccrc.unsw.edu.au/Copenhagen/Copenhagen_Diagnosis_LOW.pdf

Probabilistic Forecast for Twenty-First-Century Climate Based on Uncertainties in Emissions (Without Policy) and Climate Parameters

Sokolov et al. (2009)

http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt169.pdf

Coupling of CO₂ and Ice Sheet Stability Over Major Climate Transitions of the Last 20 Million Years

Tripathi (2009)

<http://atripathi.bol.ucla.edu/23.pdf>

Stabilizing climate requires near-zero emissions

Matthews, Caldeira. (2008)

http://www.see.ed.ac.uk/~shs/Climate%20change/Data%20sources/Matthews_Caldeira_%20Instant%20zero%20C%20GRL2008.pdf

Target atmospheric CO₂: Where should humanity aim?

Hansen et al. (2008)

<http://arxiv.org/ftp/arxiv/papers/0804/0804.1126.pdf>

Reductions of greenhouse gas emissions in Annex I and non-Annex I countries for meeting concentration stabilisation targets

Elzen, Höhne. (2008)

<http://se-server.ethz.ch/staff/af/fi159/D/De166.pdf>

Scientific Certainty Argumentation Methods (SCAMs): Science and the Politics of Doubt
Freudenberg et al. (2008)

http://sciencepolicy.colorado.edu/students/envs_4800/freudenberg_2008.pdf

Eustatic variations during the Paleocene-Eocene greenhouse world

Sluijs et al. (2008)

<http://ic.ucsc.edu/~acr/BeringResources/Articles%20of%20interest/Central%20Artic/Sluijs%20et%20al%202008b.pdf>

Accelerated decline in the Arctic sea ice cover

Comiso et al. (2008)

http://www.seas.harvard.edu/climate/seminars/pdfs/comiso_etal_2008.pdf

Linkages between CO₂, climate, and evolution in deep time

Royer (2008)

<http://www.pnas.org/content/105/2/407.full.pdf>

Vulnerability of Permafrost Carbon to Climate Change: Implications for the Global Carbon Cycle

Schuur et al. (2008)

<http://www.aibs.org/bioscience-press-releases/resources/Schuur.pdf>

Pliocene Role in Assessing Future Climate Impacts

Robinson et al. (2008)

http://pubs.giss.nasa.gov/docs/2008/2008_Robinson_etal.pdf

Accelerated Arctic land warming and permafrost degradation during rapid sea ice loss

Lawrence et al. (2008)

http://www.colorado.edu/geography/class_homepages/geog_4271_f10/readings/week_10_lawrence_et_al_2008.pdf

The 2° C. Target Information reference document

Background on impacts emission pathways mitigation options and costs.

Prepared and adopted by the EU climate change expert group 'EG Science' 9 July 2008

“Global warming of 2°C above pre-industrial levels cannot be considered safe. Considerable climate change impacts are already felt today and will have to be faced in the future – even below 2°C.”

http://ec.europa.eu/clima/policies/international/negotiations/future/docs/brochure_2c_en.pdf

Responses of permafrost to climate change and their environmental significance, Qinghai-Tibet Plateau

Guodong Cheng, Tonghua. (2007)

<http://www.cwru.edu/affil/tibet/tibetanNomads/documents/ChengandWu2007.pdf>

Changes in Atmospheric Constituents and in Radiative Forcing
Solomon et al. (2007)

<http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-chapter2.pdf>

Contributions to accelerating atmospheric CO₂ growth from economic activity, carbon intensity, and efficiency of natural sinks

Canadell et al. (2007)

<http://www.pnas.org/content/104/47/18866.full.pdf>

Saturation of the Southern Ocean CO₂ Sink Due to Recent Climate Change

Le Quéré et al. (2007)

<http://www.cccma.ec.gc.ca/papers/ngillett/PDFS/1735.pdf>

Climate–Carbon Cycle Feedback Analysis: Results from the C4MIP Model Intercomparison
Friedlingstein et al. (2006)

<http://pubman.mpdl.mpg.de/pubman/item/escidoc:994545:1/component/escidoc:994544/JClim19-14-3337.pdf>

Dynamics of the terrestrial biosphere, climate and atmospheric CO₂ concentration during interglacials: a comparison between Eemian and Holocene

Schurgers et al. (2006)

<http://en.youscribe.com/catalogue/reports-and-theses/knowledge/natural-science/dynamics-of-the-terrestrial-biosphere-climate-and-atmospheric-1651555>

Anthropogenic Warming of the Oceans: Observations and Model Results

Pierce et al. (2006)

<http://journals.ametsoc.org/doi/pdf/10.1175/JCLI3723.1>

Greenhouse-gas emission targets for limiting global warming to 2 °C

Meinshausen et al. (2006)

<http://www.iac.ethz.ch/people/knuttir/papers/meinshausen09nat.pdf>

Subtropical Arctic Ocean temperatures during the Palaeocene/Eocene thermal maximum

Sluijs et al. (2006)

http://igitur-archive.library.uu.nl/bio/2007-0807-200242/sinninghe_06_subtropical_arctic.pdf

Missing feedbacks, asymmetric uncertainties, and the underestimation of future warming

Margaret S. Torn and John Harte. (2006)

<http://media.cigionline.org/geoeng/2006%20-%20Torn%20and%20Harte%20-%20Missing%20feedbacks,%20asymmetric%20uncertainties,%20and%20the%20underestimation%20of%20future%20warming.pdf>

Time-dependent response of the global ocean clathrate reservoir to climatic and anthropogenic forcing

David Archer, Bruce Buffett. (2005)

<http://geosci.uchicago.edu/~archer/reprints/archer.2005.clathrates.pdf>

Earth's Energy Imbalance: Confirmation and Implications

Hansen et al. (2004)

<http://meteora.ucsd.edu/cap/pdf/Hansen-04-29-05.pdf>

How to kill (almost) all life: the end-Permian extinction event

Benton, Twitchett. (2003)

<http://palaeo.gly.bris.ac.uk/Benton/reprints/2003TREEPTTr.pdf>

Atmospheric carbon dioxide concentrations over the past 60 million years

Paul N. Pearson (2000)

<http://www.nature.com/nature/journal/v406/n6797/pdf/406695a0.pdf>

Climate and atmospheric history of the past 420,000 years from the Vostok ice core, Antarctica

Petit et al. (1999)

http://geoweb.princeton.edu/people/bender/lab/downloads/Petit_et_al_1999_copy.pdf

Ice Core Records of Atmospheric CO₂ Around the Last Three Glacial Terminations

Fischer et al. (1999)

<http://epic.awi.de/825/1/Fis1999a.pdf>

A blast of gas in the latest Paleocene: Simulating first-order effects of massive dissociation of oceanic methane hydrate

Dickens et al. (1997)

<http://geology.gsapubs.org/content/25/3/259.abstract>

Evidence from polar ice cores for the increase in atmospheric CO₂ in the past two centuries

Neftel et al. (1985)

<http://www.nature.com/nature/journal/v315/n6014/pdf/315045a0.pdf>

Climate Response Times: Dependence on Climate Sensitivity and Ocean Mixing

Hansen et al. 1985

http://eaps4.mit.edu/research/papers/Hansen_et_al_1985.pdf

CO₂ as heat absorptive

Total Absorptance of Carbon Dioxide in the Infrared

Burch et al. (1970)

<http://www.opticsinfobase.org/ao/abstract.cfm?uri=ao-1-6-759>

The concentration and isotopic abundances of carbon dioxide in the atmosphere
Keeling (1960)

http://scrippsco2.ucsd.edu/publications/keeling_tellus_1960.pdf

Articles

Is Global Warming Happening Faster Than Expected? (2012)

<http://www.scientificamerican.com/article.cfm?id=is-global-warming-happening-faster-than-expected>

Experts Fear Collapse of Global Civilization (2013)

<http://www.ipsnews.net/2013/01/experts-fear-collapse-of-global-civilisation/>

World's Big Trees Are Dying: Alarming Increase in Death Rates Among Trees 100-300 Years Old (2012)

<http://www.sciencedaily.com/releases/2012/12/121206162519.htm>

The ugly side of solar panels (2008)

<http://www.lowtechmagazine.com/2008/03/the-ugly-side-o.html>

Ice Sheet Loss at Both Poles Increasing, Study Finds (2012)

<http://www.jpl.nasa.gov/news/news.php?release=2012-376&rn=news.xml&rst=3604>

Biofuel boom could lead to life-threatening ozone pollution (2013)

<http://news.mongabay.com/2013/0109-hance-biofuel-ozone.html>

Climate change: It's even worse than we thought

<http://www.newscientist.com/special/worse-climate>

The 'Land of 10,000 Lakes' Is Running Dry (2013)

<https://www.commondreams.org/headline/2013/02/25-7>

How the IPCC is more likely to underestimate the climate response

<http://skepticalscience.net/pdf/rebuttal/ipcc-scientific-consensus-intermediate.pdf>

New report shows “green” biofuels made from palm oil accelerating climate change (2013)

<http://dgrnewsservice.org/2013/02/01/new-report-shows-green-biofuels-made-from-palm-oil-accelerating-climate-change/>

Glaciologist says carbon emissions to date will cause 69 foot sea level rise (2013)

<http://dgrnewsservice.org/2013/01/31/glaciologist-says-carbon-emissions-to-date-will-cause-69-foot-sea-level-rise/>

NASA says climate change is devastating Amazon rainforest (2013)

<http://dgrnewsservice.org/2013/01/19/nasa-says-climate-change-is-devastating-amazon-rainforest/>

Books

Ishmael

by Daniel Quinn

Ishmael examines mythology, its effect on ethics, and how that relates to sustainability. The novel uses a style of Socratic dialogue to deconstruct the notion that humans are the pinnacle of biological evolution. It posits that human supremacy is a cultural myth, and asserts that modern civilization is enacting that myth with dangerous consequences.

The Revenge of Gaia

by James Lovelock

For millennia, humankind has exploited the Earth without counting the cost. Now, as the world warms and weather patterns dramatically change, the Earth is beginning to fight back. James Lovelock, one of the giants of environmental thinking, argues passionately and poetically that, although global warming is now inevitable, we are not yet too late to save at least part of human civilization. This short book, written at the age of eighty-six after a lifetime engaged in the science of the earth, is his testament.

Beyond Civilization

by Daniel Quinn

"If a team of Martian anthropologists were to study our culture, their initial findings might read something like this: These people have the strange idea that the thing they call civilization is some sort of final, unsurpassable invention. Even though vast numbers of them suffer in this oppressively hierarchical system, and even though it appears to be plunging them toward a global catastrophe, they cling to it as if it were the most wonderful thing (as they quaintly say) since sliced bread. That a more agreeable (and less catastrophic) system exists BEYOND civilization, seems to be entirely unthinkable to them." -Daniel Quinn, Beyond Civilization

Endgame

by Derrick Jensen

A passionate forecast of how industrial civilization, and the persistent and widespread violence it requires, is unsustainable. Jensen's intricate weaving together of history, philosophy,

environmentalism, economics, literature and psychology has produced a powerful argument that demands attention. Resistance catapults this discussion into a passionate call for action. Using his premises as guidelines for exploring real-world problems, Jensen guides us toward concrete solutions by focusing on our most primal human desire: to live on a healthy earth overflowing with uncut forests, clean rivers, and thriving oceans that are not under the constant threat of being destroyed.

Deep Green Resistance: Strategy to Save the Planet by Aric McBay, Lierre Keith, and Derrick Jensen

Deep Green Resistance starts where the environmental movement leaves off: industrial civilization is incompatible with life. Technology can't fix it, and shopping—no matter how green—won't stop it. To save this planet, we need a serious resistance movement that can bring down the industrial economy. Deep Green Resistance evaluates strategic options for resistance, from nonviolence to guerrilla warfare, and the conditions required for those options to be successful. Excerpt: <http://www.deepgreenresistance.org/book/excerpts/>

The Underminers: A Practical Guide for Radical Change by Keith Farnish

Industrial Civilization is likely to be the last great empire humanity will ever see. If it is allowed to continue in its ravenous way then there is no future for humanity, for the natural systems and processes that allow humans to exist on Earth are the very things that Industrial Civilization is destroying. In fact, no form of civilization has ever been sustainable nor ever will be. In order for humanity to continue on Earth then civilization has to stop, and people allowed to return to a way of living that is connected to the real world. Book: <http://ia701501.us.archive.org/15/items/UnderminersV1.1/UnderminersText-1.1.pdf>

Walking Away from Empire by Guy McPherson

“At this late juncture in the era of industry, it seems safe to assume we face one of two futures. If we continue to burn fossil fuels, we face imminent environmental collapse. If we cease burning fossil fuels, the industrial economy will collapse. Industrial humans express these futures as a choice between your money or your life, and tell you that, without money, life isn't worth living. As should be clear by now, industrial humans — or at least our “leaders” — have chosen not door number one (environmental collapse) and not door number two (economic collapse), but both of the above.” -Guy McPherson, Walking Away from Empire

Green Illusions by Ozzie Zehner

We don't have an energy crisis. We have a consumption crisis. And this book, which takes aim at cherished assumptions regarding energy, offers refreshingly straight talk about what's wrong with the way we think and talk about the problem. Though we generally believe we can solve environmental problems with more energy—more solar cells, wind turbines, and biofuels—alternative technologies come with their own side effects and limitations. If consumption is the problem, as Ozzie Zehner suggests, then we need to shift our focus from suspect alternative energies to improving social and political fundamentals: walkable communities, improved consumption, enlightened governance, and, most notably, women's rights. Excerpt: http://www.nebraskapress.unl.edu/supplements/excerpts/Spring%2012/9780803237759_excerpt.pdf

Human Dependence on Nature by Haydn Washington

Humanity is dependent on Nature to survive, yet our society largely acts as if this is not the case. The energy that powers our very cells, the nutrients that make up our bodies, the ecosystem services that clean our water and air; these are all provided by the Nature from which we have evolved and of which we are a part. This book examines why we deny or ignore this dependence and what we can do differently to help solve the environmental crisis.

Websites

National Oceanic and Atmospheric Administration (NOAA)
<http://www.noaa.gov>

Skeptical Science
<http://www.skepticalscience.com>

NASA Goddard Institute for Space Studies
<http://www.giss.nasa.gov>

Intergovernmental Panel on Climate Change (IPCC)
<http://www.ipcc.ch>

United Nations Environment Programme Climate Change
<http://www.unep.org/climatechange/>

Nature Climate Change
<http://www.nature.com/nclimate/index.html>

Arctic Sea Ice Blog

<http://neven1.typepad.com>

Scripps Institution of Oceanography

<http://www.sio.ucsd.edu>

World Meteorological Organization (WMO)

http://www.wmo.int/pages/index_en.html

C02Now.org

<http://co2now.org>

Deep Green Resistance

<http://www.deepgreenresistance.org>

Nature Bats Last

<http://guymcpherson.com>