

The Newspeak Road to Four Degrees Celsius

By <u>Dr. Andrew Glikson</u> Global Research, May 15, 2019 Theme: <u>Environment</u> In-depth Report: <u>Climate Change</u>

While a price placed on the Earth, estimated at \$5000 trillion (New Formula Values Earth), belongs to the unthinkable, the haggle by conservatives over the price of mitigation of climate change underpins the reality of the Faustian Bargain, manifested by extreme weather events (Fig. 1). Under a plethora of misconceptions and cover-ups the current elections take little account of the scientific evidence, with greenhouse gas level reaching 411.97ppm CO₂ and more than 460ppm CO₂ equivalent (CO₂+methane+nitric oxide).

This is just below the 500-600 ppm stability threshold of the Greenland and Antarctic ice sheets. A slow-down or arrest of carbon emissions is no longer sufficient to stabilize the climate, because the warming effect of the high greenhouse gas level is triggering amplifying feedback effects from land, oceans, melting ice sheets and permafrost. As the Arctic warms at twice the rate of lower latitudes and thereby the jet stream and polar boundary are weakening, cold air masses penetrate southward and warm air masses penetrate northward, ensuing in further melting and leading to intensification of extreme weather events.

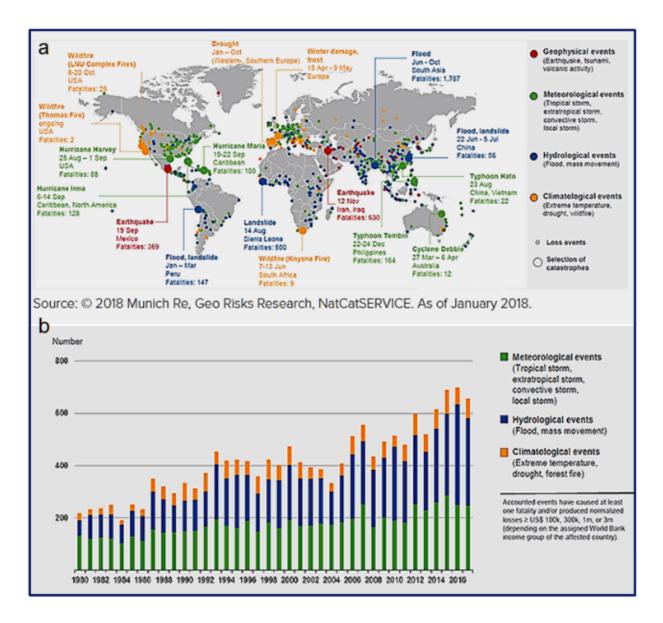


Fig. 1. (a) distribution of extreme natural events 2017; (b) Number of natural catastrophes 1980-2016.

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All but ignored by the main parties and in a sense by the mainstream media:

- The conservatives' ideology could not have been expressed more clearly than when the current PM introduced a <u>lump of coal into parliament</u> as an ideological statement.
- The opportunism of the alternative government is manifested in accepting the mining and export of coal.
- Even the Greens appear to hesitate in conveying the full science-based consequences of the climate catastrophe to the public, as to not to scare voters.
- The culture of the mainstream media hinges on political, economic and social issues, much less on science and nature, hence a bias away from the underlying factors of global warming and environmental destruction.

Between 1870 and 2014 cumulative emissions totaled about 545 billion tons of carbon (GtC), global annual mean CO_2 concentration having increased by more than 47% since the start of the Industrial Revolution. CO_2 emissions are partitioned among the atmosphere (~230 GtC or 42%), ocean (~155 GtC or 28%) and land (~160 GtC or 29%).

This represents the largest transfer of carbon from the Earth crust to the atmosphere since the Paleocene-Eocene boundary thermal maximum (PETM) 56 million years ago.

Further transfer of carbon from the known fossil fuel reserve (<u>larger than 3000 GtC</u>) to the atmosphere is threatening a fundamental shift of state in the terrestrial climate, exceeding the stability threshold of the large ice sheets and trigger amplifying feedbacks from land (desiccation of vegetation and fires), ocean (decreased sequestration of CO_2), melting ice sheets and permafrost.

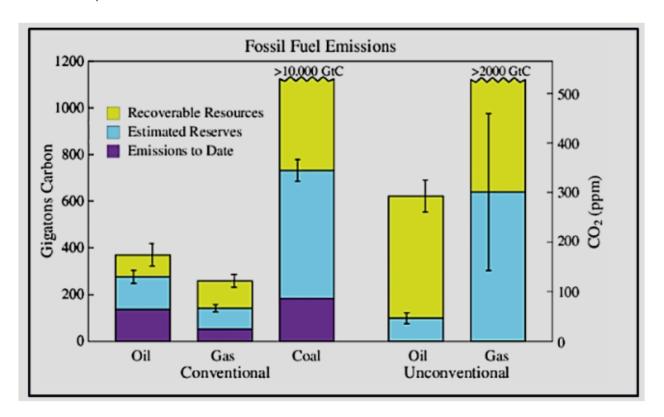


Fig. 2. Fossil fuel CO_2 emissions and carbon content. (2.12 GtC = 1 ppm atmospheric CO_2). Estimates of reserves (profitable to extract at current prices) and resources (potentially recoverable with advanced technology and/or at higher prices) are the mean of estimates of Energy. Hansen et al. 2013. See <u>this</u>

The principal method of "manufactured consent" is the *Big Lie*, articulated by George Orwell as <u>Newspeak</u>, "a controlled language of restricted grammar and limited vocabulary, meant to limit the freedom of thought, personal identity, self-expression, free will, that threatens the ideology of the régime". Contemporary examples intended to cover-up on the increasing carbon saturation of the terrestrial atmosphere include:

- A <u>climate change denial industry</u> well-funded by fossil fuel corporations and mouthpieces in the media and government is proceeding unabated, disowning the basic laws of physics (the <u>blackbody radiation law</u> of Stefan Boltzmann, Planck and Kirchhoff and direct observations in nature by the peer reviewed scientific literature and the <u>IPCC</u>).
- The common misconception as if restriction of carbon emissions is in itself sufficient to arrest global warming, as unfortunately the stage has been reached when it is no longer sufficient and CO₂draw-down efforts need to be undertaken as well as sharp cutting in emissions in order to stabilize the climate.
- The extraterritorial drilling and the export of fossil fuels are hardly mentioned. In Norway the limits on domestic emissions cannot hide ocean drilling while in

Australia coal export results in approximately <u>twice as much</u> the domestic emissions.

 Politicians frequently talk about the *future* of the economy, prosperity, and children. Unfortunately the rate and scale of global warming in the 21st century pose serious questions on such predictions.

Current global warming is expressed by a series of extreme events (Fig. 1) around the world, including both sharp rises in temperature as well as sharp freeze events induced by flow of ice melt water from melting ice sheets and penetration of polar fronts through a weakened Arctic Jet stream boundary. A 3 to 4 degrees Celsius warming, projected by the IPCC toward the end of the 21^{st} century, represents an absolute calamity on a geological scale, exceeding those of the Paleocene-Eocene Thermal Maximum (PETM) at 56 million years ago. Whereas the onset of the PETM is estimated at approximately $\sim 10,000$ years long or less, the rate of the Anthropocene global warming is more extreme, i.e. 1.5° C over the continents in less than 250 years.

Only a global effort at <u>down-draw</u> (<u>sequestering</u>) of <u>atmospheric carbon</u>, if successful, may be able to arrest this trend, a measure hardly considered by the powers that be. As nations spend <u>\$trillions on armaments and war</u>, including nuclear missiles, which are the very resources needed to protect the environment, bar lip service and non-binding agreements governments are now presiding over the demise of much of nature and human civilization.

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