

13 Resources Relating to Understanding and Mitigating Global Warming and Climate Change

[Text (and links) from p. 1-4 of "[Convergence of Critical Challenges Alert to Peacebuilders, Chaplains--from cpcsi.org](#)" (10 pages; February, 2017) by Stefan Pasti, Founder and Resource Coordinator of The Community Peacebuilding and Cultural Sustainability (CPCS) Initiative (at www.cpcsi.org)]

"... remaining within the temperature goal of 1.5°C ... would require net-zero emissions at some point between 2040 and 2060 (even if negative emissions technologies can be deployed at scale), thus requiring radical near-term reductions in energy sector CO2 emissions, employing every known technological, societal and regulatory decarbonisation option."

[From the Executive Summary of "World Energy Outlook 2016" (p. 5) released on November 16, 2016 by the International Energy Agency (IEA)]

The cultural transformation necessary to reduce greenhouse gas emissions, and mitigate global warming is, by itself, enough to justify the highest level of warning since:

- a) there is uncertainty about how negative feedback loops are triggered
- b) there is a quickly closing window of opportunity for staying below +2°C (+3.6°F)
- c) although there is much very credible information available--about what causes global warming and climate change, and what we can do to reduce Greenhouse Gas Emissions and minimize negative impacts--we live in *very complex cultural landscapes*, and there are many different kinds of moral compasses attempting to navigate such landscapes.

So even though it might not be necessary, included below are 13 resources relating to understanding and mitigating global warming and climate change--which may help educators who are in need of such resources.

- 1) Overview--"[The Carbon Story](#)" (with helpful visualizations in an interactive story line from 800,000 B.C. to 2013) at The Global Carbon Atlas website (an affiliate of The Global Carbon Project). "The Global Carbon Project is a scientific program that aims to draw a complete picture of the carbon cycle on planet Earth".
- 2) The Wikipedia webpage titled "[Carbon Dioxide in the Earth's Atmosphere](#)" is a most comprehensive overview, which includes sections titled "Past concentration", "Atmospheric carbon dioxide and the greenhouse effect", "Atmospheric carbon dioxide and the carbon cycle", "Atmospheric carbon dioxide

and the oceanic carbon cycle”, and “Anthropogenic CO₂ emissions”. Graphs and charts include: “Life Timeline”, a pictogram of the Greenhouse Effect, and a very helpful diagram of the fast carbon cycle.

3) The World Resources Institute has a blog entry titled [“The History of Carbon Dioxide Emissions”](#) (dated May 21, 2014). The eleven graphs and charts include “1960-2011: Per Capita Emissions in the West--Stable, but High” and “2011: The Top 10 Emitting Countries Still Make Up 78 Percent of Global CO₂ Emissions”.

4) NASA (National Aeronautics and Space Administration--U.S. Government Agency) has a webpage titled “Global Climate Change: Vital Signs of the Planet”, which includes links to graphs and charts in five subject areas: Carbon Dioxide, Global Temperature, Arctic Sea Ice Minimum, Land Ice, and Sea Level. To access the five subject areas, begin at the “evidence” webpage (<http://climate.nasa.gov/evidence/>), and then click on “Vital Signs”.

5) The U.S. Environmental Protection Agency’s webpage [“Global Greenhouse Gas Emissions Data”](#) provides four charts which include “Global Emissions by Economic Sector” (chart data from 2011-2015, with helpful details).

6) On January 31, 2008, a nationwide “teach-in” on global warming and climate change (an all-day symposium called “Focus the Nation: Global Warming Solutions for America”) took place at more than 1,500 institutions (mostly colleges and universities). Included here are two articles about that nationwide “teach-in”:

a) [“Campus joins national Focus the Nation “teach-in” with Jan. 31 global warming symposium”](#)

(University of California, Berkeley)

b) [“Students, Faculty Join Focus The Nation Teach-In”](#) (Bowling Green State University)

7) [ICLEI - Local Governments for Sustainability](#) “is the leading global network of more than 1,500 cities, towns and regions committed to building a sustainable future.”

8) The Compact of Mayors “is a global coalition of mayors and city officials pledging to reduce local greenhouse gas emissions, enhance resilience to climate change, and to track their progress transparently” (for more details, see November 13, 2016 Press Release [“The Global Covenant of Mayors for Climate & Energy Announces its Global Impact”](#)).

9) On 25 September, 2015, a bold new global agenda to end poverty by 2030 and pursue a sustainable future was [unanimously adopted by the 193 Member States of the United Nations](#) at the start of a three-day Summit on Sustainable Development. On 1 January 2016, the [17 Sustainable Development Goals \(SDGs\)](#) of the [2030 Agenda for Sustainable Development](#)--adopted by world leaders in September 2015 at an historic UN summit--officially came into force.

10) On 15 December, 2015, [in Paris, France, a historic agreement was reached](#), as 195 countries adopted a new universal, legally binding global climate deal. [The Paris Agreement entered into force on 4 November 2016](#) (as of 8 February 2017, 129 Parties have ratified of 197 Parties to the Convention).

Here are two summaries of the Paris Agreement which this writer felt were especially informative:

a) [“The Paris Agreement: Turning Point for a Climate Solution”](#) (from staff at the World Resources Institute)

b) [“Judging the COP21 outcome and what’s next for climate action”](#) (from staff at E3G)

- 11) The [Executive Summary of “World Energy Outlook 2016”](#) [released on November 16, 2016 by the International Energy Agency (IEA)] includes the following assessments:
- a) “Countries are generally on track to achieve, and even exceed in some instances, many of the targets set in their Paris Agreement pledges; this is sufficient to slow the projected rise in global energy-related CO2 emissions, but not nearly enough to limit warming to less than 2°C.” (p. 2)
 - b) “The transformation required for a reasonable chance of remaining within the temperature goal of 1.5°C is stark. It would require net-zero emissions at some point between 2040 and 2060 (even if negative emissions technologies can be deployed at scale), thus requiring radical near-term reductions in energy sector CO2 emissions, employing every known technological, societal and regulatory decarbonisation option.” (p. 5)
- 12) A Press Release (dated December 12, 2016) from DivestInvest titled [“Assets Pledged To Fossil Fuel Divestment Surpass \\$5 Trillion, Says New Report”](#) includes:
- a) “According to a new analysis released today by Arabella Advisors, 688 institutions and 58,399 individuals across 76 countries have committed to divest from fossil fuels.”
 - b) “What began on a few college campuses in the U.S. has spread to every corner of the world, squarely into the financial mainstream. Divestment has permeated every sector of society: from universities and pension funds, to philanthropic and cultural institutions, to cities, faith groups, insurance companies and more.”
- 13) CPCS Initiative document [“59 Recommended Sources on Twitter--for News, Information, and Solutions on Global Warming and Climate Change”](#) (7 pages; Feb. 2017)