

## Preface March 2025

Second year in a row – 2024 experienced the warmest climate on record, World Meteorological Organization, <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level> . Not only the warmest but it was 1.55°C above pre-industrial level. January 2025 was the warmest January on record.

2024 has seen particularly destructive wildfires in Jasper National Park, Canada <https://parks.canada.ca/pn-np/ab/jasper/visit/feu-alert-fire/feudeforet-jasper-wildfire> and around the City of Los Angeles [https://earthisland.org/journal/index.php/articles/entry/the-los-angeles-wildfires-are-climate-disasters-compounded?utm\\_source=google&utm\\_medium=paid&utm\\_campaign=tfd\\_dsa&gad\\_source=1&gclid=EAlaQobChMIy5iw9bvkiwMV5hGtBh0qyAKDEAAYASAAEgJNm\\_D\\_BwE](https://earthisland.org/journal/index.php/articles/entry/the-los-angeles-wildfires-are-climate-disasters-compounded?utm_source=google&utm_medium=paid&utm_campaign=tfd_dsa&gad_source=1&gclid=EAlaQobChMIy5iw9bvkiwMV5hGtBh0qyAKDEAAYASAAEgJNm_D_BwE) and several other locations around the world <https://atmosphere.copernicus.eu/cams-global-wildfires-review-2024-harsh-year-america#:~:text=Summary&text=The%20year%202024%20saw%20contrasting,data%2C%20going%20back%20to%202003>.

According to the World Meteorological Organization 95% of countries miss the UN deadline to submit 2035 climate pledges, [https://www.carbonbrief.org/analysis-95-of-countries-miss-un-deadline-to-submit-2035-climate-pledges/?utm\\_source=cbnewsletter&utm\\_medium=email&utm\\_term=2025-02-14&utm\\_campaign=Daily+Briefing+12+02+2025](https://www.carbonbrief.org/analysis-95-of-countries-miss-un-deadline-to-submit-2035-climate-pledges/?utm_source=cbnewsletter&utm_medium=email&utm_term=2025-02-14&utm_campaign=Daily+Briefing+12+02+2025) .

The United States (White House and Congress) is attacking anything to do with climate science including mitigation efforts to avoid the very real impact of global warming. The inevitable need to adapt to the effects of climate change will come as a great surprise and cost.

It appears quite uncertain that the world will be able to constrain global warming to below 2°C by 2100.

A number of the web sites quoted in this Guide will disappear as a consequence of the pogrom on climate change science directed by the current government of the United States. I have not removed affected web sites (published by very reputable American organizations) from the text as their absence will be a testimony to the extent of the government actions will be very clear to readers when they attempt to access the web sites.

It is comforting to know that governments come and go and that policies, of all sorts, can change or even be reversed in time. New policies will be developed.

Unless successfully mitigated, the impacts of global warming and climate change will become more severe affecting more millions of people worldwide and, of course, all of nature. The effects of excessive heat, drought, wildfires, flooding, increasing frequency of extreme weather will result in the collapse of economies, civil society and governance. War and civil war may result. People will do what they need to do to survive including mass migration from affected regions to regions which appear relatively unaffected or at least more secure, for the moment.

It would be naïve to think that efforts to mitigate climate change would come without considerable resistance. Governments, unconcerned businesses (guided by their shareholders only interested in short term financial gain), and the oligarchs of the world cannot control or stop global warming by simply ignoring it or by denying the validity of the science. Political reactions to the real-time unfolding of the effects of global warming and climate change are inevitable. Governments will change.

Governments cannot act alone. The Intergovernmental Panel on Climate Change has got it right – they emphasize that the world needs to act as one to mitigate the worst effects of global warming.

At the time of writing, it appears that global action to mitigate global warming is diminishing; but this will change. and meaningful actions at the local level, while essential, cannot result in mitigation actions required.

Somehow, the science of global warming and climate change, at least its message, must be communicated to the general public so as to impress on them how human caused activities are negatively impacting the biosphere. The public must understand that they are capable of limiting the worst effects of climate change – if they act immediately as guided by the science.

In my opinion, self-serving denial of the science of climate change is not only antisocial (anti-life); but, is a criminal act.