

### Atmospheric Carbon Dioxide residence time

In a 2003 IPCC report, The Intergovernmental Panel on Climate Change gave a range of 5 years to 200 years for residence time, which can be a range of time. However, most Chemical Engineers use average residence time. That is what we are interested in. We need to know on average how long it takes a molecule to be consumed by photosynthesis, diffused to the exosphere, or captured by oceans. This time is at least 150 years. The full manuscript can be accessed at:

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017JD028121> This is more than 160 PhD in 19 published manuscripts summarized in one published manuscript.

Residence Time (Years)	Author	Year
700	Allen	2009
610	Zickfeld	2013
500	Matthews	2008
300	Plattner	2008
270	Cao	2010
230	Zickfeld	2012
220	Solomon	2012
220	Knutti	2012
210	Gillett	2011
180	Frolicher	2010
150	Hare	2006

**Even at a residence time of 100 years, atmospheric CO<sub>2</sub> never lowers as a result of working on emissions. Constraints for this chart.**

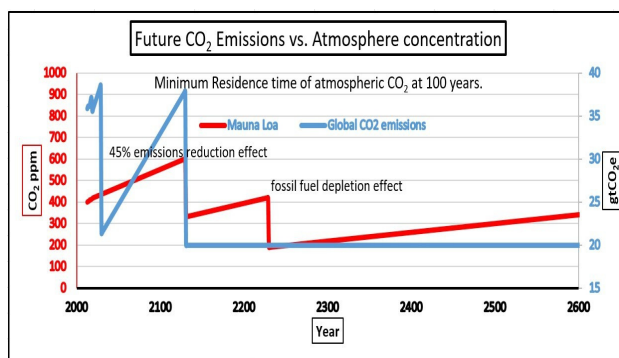
**45% reduction in fossil fuel CO<sub>2</sub> emissions by 2030**

**55% reduction in fossil fuel CO<sub>2</sub> emissions by 2130 due to depletion of those fuels.**

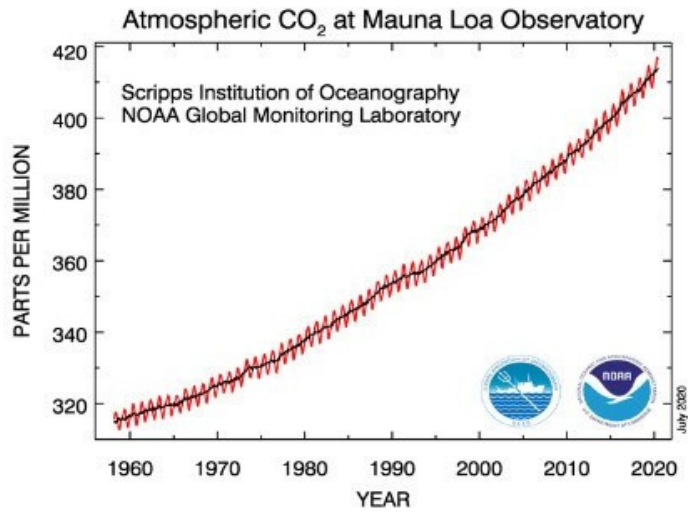
**2030 45% reduction in the rate of rise of Atmospheric CO<sub>2</sub>.**

**2130 45% reduction in CO<sub>2</sub> concentration**

**2230 55% reduction in CO<sub>2</sub> concentration and rate.**



Another way to look at residence time is a signature from past events, which lowered CO<sub>2</sub> emissions. As an example oil embargo in the 1970's, multiple recessions and the big worldwide recession in 2009. The current COVID-19 pandemic. These are examples of lowered worldwide emissions. Below is the current graph of Mauna Loa CO<sub>2</sub>. You can clearly see no signature from these events.



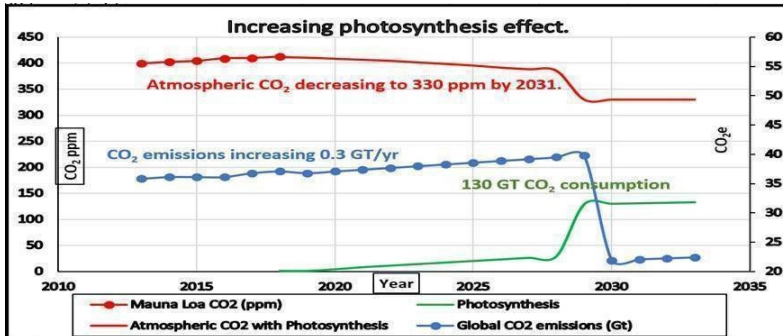
Why is the residence time increasing? Because of massive worldwide non-sustainable deforestation.  
<http://Globalforestwatch.org/map>

A selection of manuscripts: Northern Hemisphere forests are not consuming nearly as much carbon dioxide as most climate change scientists claim. (Northern Hemisphere (NH) forests consume 2.6 gtyr-1 (2.6 billion tons per year) of carbon dioxide. We have 36 gtyr-1 (36 billion tons per year) in CO2 emissions. This is not what lowers Mauna Loa in the NH summer with more economic activity and more CO2 emissions.

<http://www.eeb.cornell.edu/goodale/2002%20GoodaleEcolAppl.pdf>

All tropical forests in the Southern Hemisphere have switched to become oxygen consumers and carbon dioxide producers due to organic decay. (<https://science.sciencemag.org/content/358/6360/230/tab-pdf>

**However, atmospheric carbon dioxide lowers quickly with increasing photosynthesis. Plant native trees!**



The Department of Commerce Office of Inspector General (OIG) has received your correspondence and reviewed the information you provided. We have assigned complaint number 20-0641.

Leftmedialies.com-> COVID-19

1. COVID-19 is NOT airborne transmitted
2. Hydroxychloroquine and Zinc are the cure for COVID-19. No Vaccine needed.
3. Children pose zero risk to spread COVID-19

1. COVID-19 is NOT airborne transmitted. One nurse explained it like this: At a party someone has glitter on their hair. By the end of the party most everyone has glitter on them.
  - a. <https://www.who.int/news-room/commentaries/detail/transmission-of-sarscov-2-implications-for-infection-prevention-precautions> Some studies conducted in health care settings where symptomatic COVID-19 patients were cared for, but where aerosol generating procedures were not performed, reported the presence of SARS-CoV-2 RNA in air samples (2328), while other similar investigations in both health care and non-health care settings found no presence of SARS-CoV-2 RNA; no studies have found viable virus in air samples. There is much more garbage science in it. You can read it for yourself!
  - b. Homeless camps have no spike in cases!
  - c. The recent riots show no spike in cases!
  - d. Sweden and Denmark have similar infection rates. One closed down for COVID-19 and the other did not!
  - e. Random vs. systematic. An airborne infection would have systematic data. COVID-19 without masks is random data!
2. COVID-19 cure is Hydroxychloroquine! 79 studies with 46 peer reviewed! Dr. Fauchi is very wrong about HCQ ! <https://c19study.com/> Countries which used HCQ have much lower death rates!
3. Children pose zero risk to spread COVID-19.  
<https://www.thetimes.co.uk/article/pupils-pose-no-risk-of-spreading-covid27q6zfd9l> We can open schools NOW!

# State of Oregon sanctioned experiment

(Non treed area) - Treed area is 28 ppm lower CO<sub>2</sub> concentration in August! 20 ppm lower in October so far.  
NIST Certified CO<sub>2</sub> sensors calibrated within 5 ppm.  
180000 autos per day.

