## The effect of human emissions on the level of atmospheric CO<sub>2</sub>

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## IPCC says

1.Natural CO<sub>2</sub> stayed at 280 ppm.

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2. Human CO<sub>2</sub> causes all the CO<sub>2</sub> increase.

**3.Human CO<sub>2</sub> stays for thousands of years.** 

IPCC says natural CO<sub>2</sub> stayed at 280 ppm, while human CO<sub>2</sub> caused all the increase, and human CO<sub>2</sub> stays in the air for thousands of years.

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IPCC also says natural CO<sub>2</sub> *Outflow* is proportional to *Level* divided by *Te*, where *Te* is the turnover time or e-time, which is "about 4 years."



The *Climate Equivalence Principle* says *Te* for human and natural CO<sub>2</sub> are identical because their carbon-12 atoms and CO<sub>2</sub> molecules are identical.



Physics says  $CO_2$  flows through the air as water flows through a lake. If the level increases, the outflow increases.



Physics says *Inflow* sets a *balance level* where *outflow* equals **inflow**. Continued inflow does not change the level. There is no accumulation.



IPCC says human inflow is about 5% of total inflow. So, the *human balance* level is 5% – and natural *balance level* is 95% – of the total level.



Yet, IPCC says human  $CO_2$  is 33% of the level. But that cannot happen because the *Te* for human and natural  $CO_2$  are identical.

For 5% of the inflow to be 33% of the balance level requires human *Te* to be 35 years while natural *Te* is 3.5 years. That would conflict with the *Climate Equivalence Principle*.



So, to get a  $CO_2$  level of 420 ppm, natural  $CO_2$  must be about 400 ppm and human  $CO_2$  about 20 ppm. So. human  $CO_2$  can't change the climate.



Before 1950, the sum of human  $CO_2$  inflow (red dotted line to 213 ppm) was less than the measured  $CO_2$  increase (black line to 137 ppm). So, natural  $CO_2$  caused the increase. So, restricting human  $CO_2$  can't change the climate.

The blue line to 33 ppm is the calculated human CO<sub>2</sub> level based on IPCC's data for its natural carbon cycle (Berry 2021, 2023).



Human  $CO_2$  has no carbon-14, so it will dilute D14C and lower the D14C balance level. However, the D14C balance level has remained at its original level, showing no effect of human  $CO_2$  on atmospheric  $CO_2$ .



Simple physics shows human  $CO_2$  flows like natural  $CO_2$ . Human  $CO_2$  is about 5% of total  $CO_2$ . So, natural  $CO_2$  caused most of the increase.

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