

First Atmospheric Carbon Dioxide equilibrium manuscript to define NetZeroCO2E is peer reviewed and published in worlds top climate change journal. The Journal of Earth Science & Climatic Change is the top most climate change Journal by impact factor! This manuscript received the following comments from the review.

The article entitled "The Essential Role of Photosynthesis in Defining Net Zero Carbon Dioxide Emissions for Equilibrium Calculations" has completed the peer review process (reviewer comments are appended below).

1. First of all I congratulate author for an amazing article about "The Essential Role of Photosynthesis in Defining Net Zero Carbon Dioxide Emissions for Equilibrium Calculations"
2. It is well written and well Explained about all the points.
3. In this study author explained about current climate change conversation and answered four main questions, by calculating photosynthesis, decreasing oxygen levels worldwide and also explained about the atmospheric Carbon dioxide is still rising even faster although the Carbon dioxide emissions rise has slowed by 50%.
4. He explains that how cap and trade policies would have zero effect on the rise of atmospheric carbon dioxide because the equilibrium point is too low. The strategy with the most positive effect on lowering atmospheric CO₂ is by increasing photosynthesis.
5. Nicely done research work. Clearly explained with tables, figures and graphs.
6. Author explained how to increase the equilibrium point to over 100 GTyr⁻¹. By only way to lower atmospheric carbon dioxide is to increase photosynthesis. The correct solution is to stop non-sustainable deforestation of large rain forests (such as those in India and the

Amazon River Basin and its tributaries) and to plant 200 billion native trees and shrubs, especially in those areas that have been deforested.

7. Author explained about planting trees to have the greatest positive impact over the upcoming crucial period.

8. There are many positive points which is useful for everyone to understand and learn from it, the article is very impressive.

Key Findings:

The Northern Hemisphere forests only consume 2.6 billion tons of carbon dioxide per year through photosynthesis.

All the southern hemisphere forests have switched to be a oxygen sink and carbon dioxide producer due to organic decay.

Ocean photosynthesis is decreasing.

The tropospheric carbon dioxide is diffusing to the exosphere not the ocean. The ocean is not a sink for carbon dioxide.

Experiment which proves we can plant native trees and shrubs near roads (where applicable) and in 10 years they will consume all the carbon dioxide from the vehicles.