

Mark Zirnsak

From: David Arnott [REDACTED]
Sent: Sunday, 23 August 2020 2:30 PM
To: Chris Dalton
Cc: Cameron McAdam; Claire Dawe; Campbell Opie; Mark Zirnsak; Andrew Stork; Margaret Arnott
Subject: Climate Change
Attachments: PDF CO2 VS Population 2020-6-26.pdf

Hi Chris,

I see in the Village Church News that you are speaking at a climate change event "How Should the Uniting Church Respond to Climate Change?" next Saturday. I thought that you may be interested in the attached, which shows the relationship between CO2 and human population. Clearly the growth in human population on the planet is a big issue. Currently, as average living standards improve we see the CO2 concentration increasing at a greater rate than population growth. Unfortunately, there is a significant lag in global population growth rates behind policy actions and it is predicted that the growth curve will only flatten toward the end of the century. We may well ask what is the attitude of the church to population and labour policies?

The issue of lag of response behind actions taken is of huge concern. I listened to a program on the ABC which discussed the effect of the ocean absorbing CO2 and as a heat sink. The relative magnitude of the ocean compared with the atmosphere, to me, came across as a major issue as it immediately raised the concept of decades of lag time in response to any human action that will be taken.

The Earth is a complex system with very complicated feedback and control mechanisms. Humans have tinkered with that system for centuries without fully understanding the consequences. I personally subscribe to the ideas of James Lovelock who saw that on Earth "living organisms interact with their inorganic surroundings on Earth to form a synergistic and self-regulating, complex system that helps to maintain and perpetuate the conditions for life on the planet." (https://en.wikipedia.org/wiki/Gaia_hypothesis).

From my perspective, the church should express an opinion on climate policy to the wider world, but should itself focus on ensuring that we determine what our own members can do toward mitigating climate change. "Do as we do not just as we say!" What is our attitude to population growth, resource distribution and use, human behaviour etc? How do we determine the greatest wisdom on conserving the planet and implement an education strategy? What is our expectation of preaching from the pulpit? How do we include post biblical wisdom into our Christian teaching and perhaps de-emphasize some of the more extreme ideas contained in the Bible?

I have not yet decided to join the Zoom meeting as I have another event which starts around 11:30.

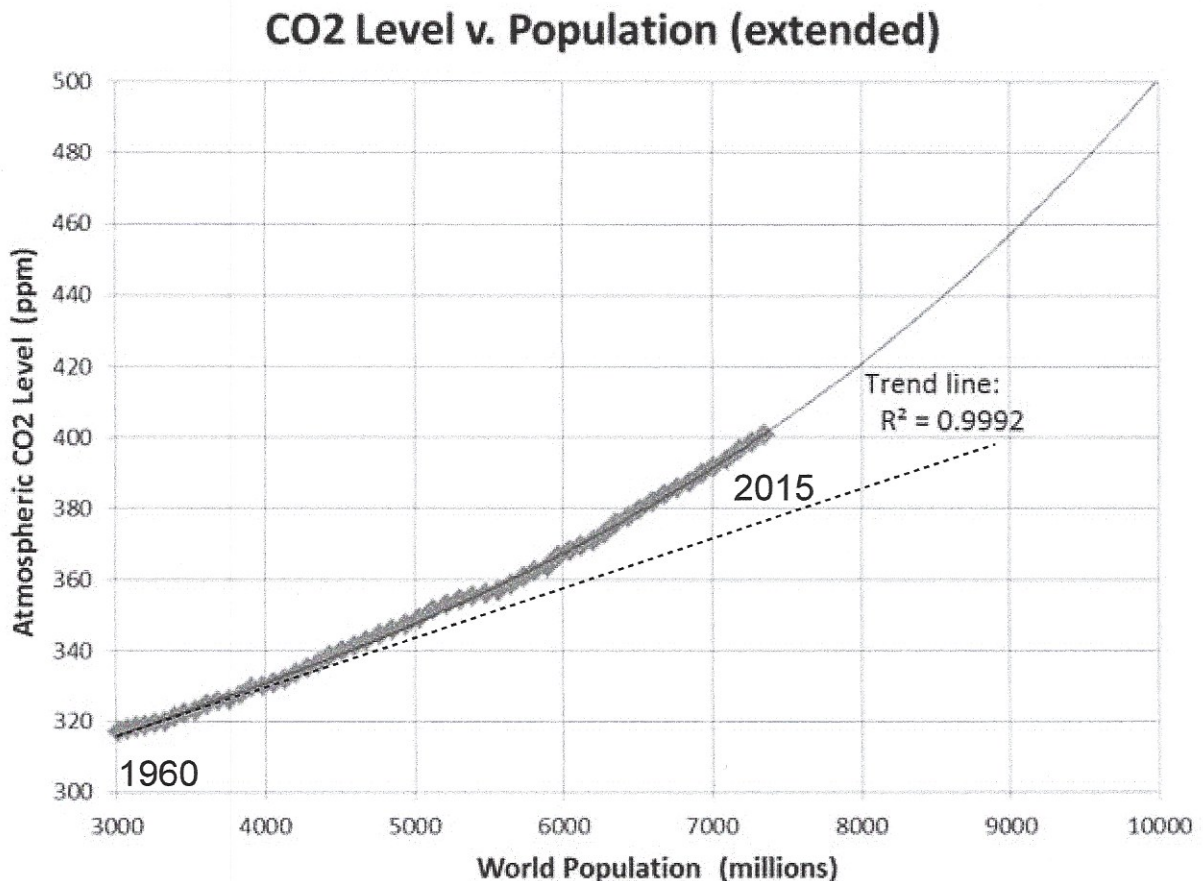
All the best

The correlation between global population and global CO2

Roger Graves

<https://wattsupwiththat.com/2016/05/17/the-correlation-between-global-population-and-global-co2/>

The message that I take from this graph is that the correlation between CO2 concentration and world population is a polynomial fit not a linear fit. The CO2 concentration is rising at a higher rate than the world population which suggests that we are generating more CO2 on average than in 1960. The projection appears to be a big challenge.



Atmospheric CO2 level versus world population from 1960 to 2015 showing a high correlation polynomial fit (after Peter Graves) but with an estimated linear projection added for comparison.