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Betreff: Net zero emissions

Now that net zero emissions have become the mantra of EU and Austrian climate policy, here are the facts:

1. Currently, atmospheric CO₂ concentration grows by about 2.44 parts per million (ppm) per year. Net zero emissions from 2050 onwards will establish a new dynamic equilibrium of carbon in atmosphere, which will be well above present 416 ppm – likely in the range of 470 ppm – and certainly way above the 250 ppm in which humanity existed ever since Homo sapiens evolved.
2. Atmospheric methane is not considered in net zero emissions policies but is responsible for approximately 23% of radiative forcing. Methane concentrations rose from 722 parts per billion (ppb) in pre-industrial times to 1866 ppb, the highest value in at least 800,000 years. There is no indication that this growth will stop in 2050.
3. The delays in the dynamics of climate (as a complex system) are enormous. Thus the delayed effects of 470 ppm are unknown. While it seems to be pretty clear that nearly all glaciers of the Alps will completely melt before 2100, it is unknown if 470 ppm will also lead to the complete melting of the Greenland ice sheet in some hundred years. Scientists consider that an increase in temperature of 2 to 3 degrees Celsius would result in a complete melting of Greenland's ice. If the entire 2,850,000 km³ of Greenland's ice were to melt, global sea level would rise 7.2 m.
4. Exponential growth always implicates that such growth accelerates exponentially. Decision makers don't seem to grasp that. Exponential growth with delayed effects is even harder to grasp. In particular, sea level seems to rise exponentially thus this rise accelerates exponentially. With 470 ppm CO₂ concentration after 2050 and continuing increase of methane concentration, it is unknown at what height and in which century sea level will stop rising.

What we are presently living through as far as climate change is concerned is a very slow motion version of the exponential spreading of SARS-CoV-2 with first cases identified in Wuhan in December 2019, its global spread in February 2020 and (after the fact) global travel bans etc. in March 2020.

Thus in my opinion net zero after 2050 will not stabilize the climate. Yet, net zero is officially declared as climate-neutral: https://en.wikipedia.org/wiki/Carbon_neutrality

It is astonishing how such nonsense has become policy mainstream in Europe and elsewhere.

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