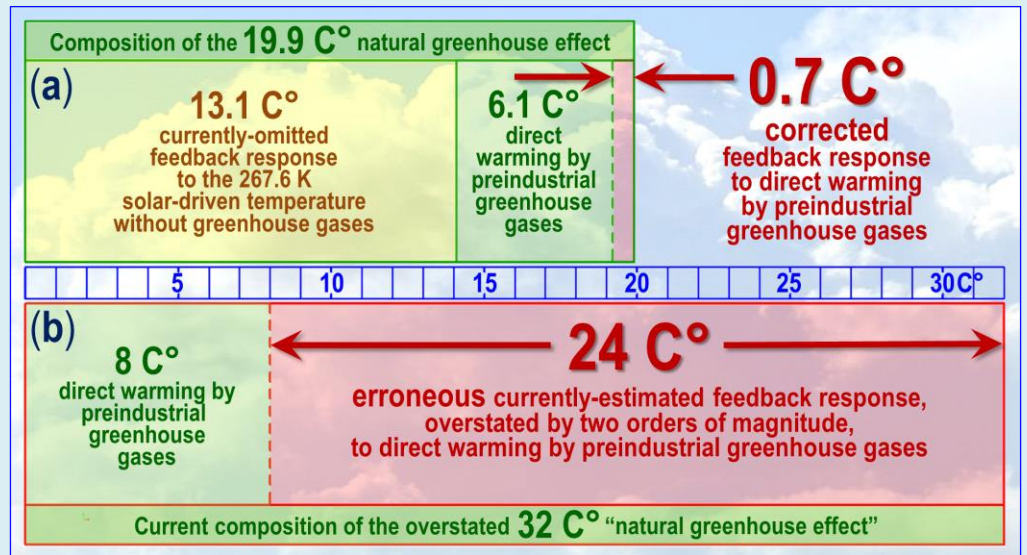


The error of physics that created a climate ‘emergence’

Climate scientists overstated natural feedback response many-fold, turning a gentle warming into a “crisis”



Clintel supports a number of theoretical projects that investigate the validity of the modeled climate crisis

Climate scientists cried “Emergency!” because they had made an error when borrowing feedback math from engineering physics. They imagined the difference between surface temperatures with and without greenhouse gases in 1850, the natural greenhouse effect, was 32 C°: 8 C° direct warming by preindustrial greenhouse gases and 24 C° natural feedback response, mostly from more water vapor in warmer air. Thus, they thought the unit feedback response – the extra warming for every 1 C° of direct warming by greenhouse gases – was $24 \div 8$, i.e., 3 C° (b above). And that is why, given 1 C° direct warming by doubled CO₂ today, they predict as much as 4 C° final warming or equilibrium climate sensitivity (ECS) (d below).

They had also forgotten that without greenhouse gases no clouds reflect the Sun’s heat back to space: so surface temperature without greenhouse gases is about 12 C° warmer than they had thought, and the true natural greenhouse effect in 1850 was not 32 C° but just 19.9 C°. Of this, 6.1 C° was direct warming by greenhouse gases, driving a feedback response of only 0.7 C°. Their 24 C° was **by far too large**. The remaining 13.1 C° was feedback response to the Sun’s heat (a above). **Climate scientists had forgotten the Sun was shining**. They mistakenly added the large feedback response to the Sun’s heat to, and miscounted it as part of, the actually small natural feedback response to direct preindustrial greenhouse-gas warming. That is how they came to predict large, fast, dangerous warming today rather than **small, slow, harmless, net-beneficial warming**.

The true preindustrial unit feedback response was $0.7 \div 6.1$, or just 0.12. So their imagined unit feedback response of 3 was **25 times too big**, or **15 times** today’s unit feedback response of about 0.19. So, given 1.06 C° direct warming by doubled CO₂, there will be $1.06 (1 + 0.19)$ or **1.25 C° final warming**. That is only a third of their 4 C° final warming, ending their “emergency”. Sure enough, real-world, observed manmade warming since 1990 (c below) has turned out to be just a third of what they had predicted that year. After correcting their error, **there will be far too little global warming to do net harm**.

