A Biblical View of the 'Climate Emergency'

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Background

1. The Earth has warmed noticeably since the end of the 'Little Ice Age' which is generally regarded as having ended in the late 18th/early 19^{th} century. At about the same time the Industrial Revolution led to a significant increase in levels of carbon dioxide (CO₂) in the Earth's atmosphere. Many scientists have come to believe that these trends are causally connected, and have proposed a mechanism (the 'Greenhouse Effect') that explains how increasing CO₂ could lead to increasing global temperatures.¹

2. As a result, many scientists, corporations, governments, and international bodies such as the UN, have become convinced that this warming is almost exclusively due to human factors, such as the use of fossil fuels and typical farming methods. Consequently, the world is facing a 'climate emergency' or 'climate catastrophe' that will lead to dire consequences for the environment and for mankind.² This gives rise to the descriptive term 'Catastrophic Anthropogenic Global Warming' (CAGW), often simply reduced to AGW, as most people in this camp take the 'Catastrophe' as read. To avert this catastrophe some extremely severe measures are advocated to reduce carbon dioxide generation in order to reach 'net zero carbon.' This has become the orthodoxy to such an extent that we might call it the 'official AGW narrative.'

3. What is surprising is that many Christian organizations have adopted the official AGW narrative: the websites of environmental charities like A Rocha, the John Ray Initiative, Operation Noah, and Green Christians—formerly commendable beacons of biblically-driven concern for the environment—show that they have uncritically swallowed the idea of a 'climate emergency.' Such organizations were perhaps pre-disposed to adopt this narrative, but it has now reached large mainstream Christian charities such as TearFund,³ as well as missions-focused groups such as Latin Link.⁴

Challenges

4. There have been several challenges to the official AGW narrative from scientific, environmental and economic sources. Among the most authoritative and useful European-based organisations are the Global Warming Policy Foundation (GWPF) and Climate

¹ Ironically, there is a much clearer explanation for the causative connection in the reverse direction: CO_2 , which is both heavier than air and water-soluble, accumulates in the oceans. As oceans warm, CO_2 is released. This is clearly seen in the annual cycle of CO_2 concentration.

² Many environmentalists are relatively indifferent to the effect on mankind, whom they believe to be a "plague on the Earth." (See the penultimate section of this report.)

³ See <u>https://www.tearfund.org/campaigns/reboot-campaign/prayer-for-the-climate</u>. Some environmental organizations are listed at <u>https://www.climatestewards.org/</u>. Some Christians have even joined Extinction Rebellion: see <u>https://christianclimateaction.org/</u>. This latter group is clearly motivated by critical theory, talking of "toxic systems", "safer spaces" and "Breaking down hierarchies of power for more equitable participation."

⁴ See <u>https://latinlink.org.uk/environment/</u> for their 'Carbon Offsetting' policy.

Intelligence (Clintel)⁵. What follows is a synopsis of just a few of the reasons for disagreement with the 'official AGW narrative.'

- To what extent human agency is solely responsible is a matter for debate. Warm periods have occurred in the past (e.g., the Medieval Warm Period, c.750-c.1350 AD) long before any human activity could conceivably have affected the climate.⁶ The 1930s in the USA were widely reported at the time as the hottest decade in living memory (and temperature records bear this out), when CO₂ levels were relatively much lower than today. The following decades were significantly colder,⁷ even as CO₂ levels continued to rise, so much so that scientists talked of the threat of 'global cooling.'
- Ice core samples from the Antarctic show a pattern of rising and falling temperatures over the course of earth history, in which the temperature rise typically *leads* (not *lags*)⁸ an increase in CO₂. A recent paper⁹ has for the first time quantified the proportion of CO₂ that can be attributed to anthropogenic causes in the most recent warming phase, concluding it is only about 12%.
- There is evidence that past temperature records (e.g., of warm periods) have been suppressed or altered,¹⁰ the most egregious example being the selective use of 'climate proxies' uncovered by Stephen McIntyre and Ross McKittrick in the 'hockey-stick controversy,' ably chronicled by Andrew Montford.¹¹ Nils-Axel Mörner, the pre-eminent scientific authority on sea levels of the last 50 years (he died in 2020), has also noted that global-warming enthusiasts were not above altering the physical evidence if it didn't match the model-driven agenda.¹² A comprehensive survey of such issues has been compiled by the climatologist Dr Tim Ball.¹³

When alleged ecological effects (usually produced by 'modelling') are contradicted by observation, those reporting it are liable to find their careers under threat and their work labelled as 'misinformation.' This was the case in the much hyped 'extinction threat' to the polar bear. The Arctic Inuit peoples were most surprised to learn this, and when one zoologist, Dr Susan Crawford, investigated the evidence she found polar bear populations thriving. Likewise, Dr Peter Ridd of James Cook University (Australia) found that stories of AGW damage to the Great Barrier

⁵ See <u>https://www.thegwpf.org/</u> and <u>https://clintel.org/world-climate-declaration/</u>

⁶ A BBC documentary (<u>https://www.youtube.com/watch?v=IM3EL94UKDM</u>) describes how ancient artefacts and a trackway that have been buried in Norwegian ice for millennia have emerged recently. Many comments on the video (but not the BBC itself) draw the obvious corollary that the temperature must have been higher when they were buried.

⁷ In the UK, these years included the notorious winters of 1940, 1947 and 1963.

⁸ See also note 1.

⁹ See https://pubmed.ncbi.nlm.nih.gov/34995221/

¹⁰ See <u>https://realclimatescience.com/climate-scientists-rewriting-the-past/</u> (in the USA) and <u>https://link.springer.com/article/10.1007/s00704-021-03887-4</u> (in the Netherlands).

¹¹ Andrew Montford, *The Hockey Stick Illusion: Climategate and the Corruption of Science*, Stacey International, London, UK, 2010.

¹² Mörner's presentation on the factors affecting sea levels, along with actual observations from various parts of the world can be found at <u>https://www.youtube.com/watch?v=dZ36ded2Wc0</u>.

¹³ Tim Ball, The Deliberate Corruption of Climate Science, Stairway Press, Seattle, WA, 2014.

Reef were not borne out when he visited the reef and made observations.¹⁴

- The effect of 'greenhouse gases' (GHGs) in "trapping" heat is less well-understood than proponents of the official AGW narrative claim. Radiation of heat from Earth's atmosphere is not uniform at all wavelengths, and different GHGs absorb different wavelengths. Pioneering work from Happer and van Wijngaarden¹⁵ based on standard atmospheric physics has shown that the effect of CO₂ is greatly exaggerated, even if current ideas about GHGs are correct. (Moreover, water vapour is a much more important GHG.)
- Some scientists dispute the basis of current climate models altogether. Zhong¹⁶ argues that from the beginning of the modern phase of climate modelling, the assumption has been that radiative transfer of heat from Earth's surface follows the Stefan-Boltzmann law, which assumes that the Earth is a 'black body'—which it demonstrably is not! Moreover, the effect of clouds is ignored completely. Another scientist who has highlighted the problem of clouds is Nobel laureate John Clauser, who observes that clouds represent an important 'thermostat' for controlling earth's temperature: the Sun heats the oceans, water vapour rises into clouds that block solar radiation and the temperature falls—a *negative feedback* loop.
- The physicist Steven Koonin¹⁷ has also emphasized the difficulty of specifying models that correctly incorporate the *albedo*, which measures the earth's ability to reflect solar radiation, including clouds but also snow, ice and aerosols. This tends to be done by parameter-tuning, which may not be based on 'knowledge' but on "producing a desired result." Koonin also remarks on the sensitivity of the albedo effect: an increase in the albedo of one percentage point would offset completely the purported effect of doubling CO₂ levels.
- The official AGW narrative claims that extreme weather (floods, hurricanes, wildfires, etc.) and adverse effects of climatic change (rising sea levels, famines) are growing in scale and frequency and that this is caused by AGW. Several well-respected scientists have analysed the data gathered by the UN's Inter-governmental Panel on Climate Change (IPCC); even if no data-tampering is assumed, they found no evidence for this contention.¹⁸
- Much of the basis for the official AGW narrative is obtained from predictive modelling of future global temperatures. Yet very few models have even managed to predict the last two decades very well. These models are indeed based on atmospheric physics, but they are of necessity too coarse-grained to capture important features (such as clouds, for example), and rely on many initial conditions whose values are

¹⁴ A video on polar bear numbers can be found at <u>https://www.youtube.com/watch?v=8VwzUBc1rsc</u>; on corals and the Great Barrier Reef at <u>https://www.youtube.com/watch?v=3WbGVAo1hyQ</u>. Both scientists have faced `cancellation' for their efforts, as discussed at length in the second video.

¹⁵ See <u>https://arxiv.org/abs/2006.03098</u>. For an explanation in less technical terms (but still not for the faint-hearted) see <u>https://clintel.org/the-greenhouse-effect-summary-of-the-happer-and-van-wijngaarden-paper/</u>.

¹⁶ Y.C.Zhong (2021) A Quantitative Description of Atmospheric Absorption and Radiation at Equilibrium Surface Temperature, *Progress in Physics*, **17.2**, 151-157.

¹⁷ See Steven E. Koonin, *Unsettled?*, BenBella Books, Dallas, TX, 2021, esp. chapters 2 and 4. Koonin is by any measure a major figure in the world of science.

¹⁸ Most recently in a comprehensive peer-reviewed paper by four leading Italian scientists, available online at https://link.springer.com/content/pdf/10.1140/epip/s13360-021-02243-9.pdf. See also Koonin, *op.cit*.

unknown. It isn't just that the models have high uncertainty in their predictions, but the vast majority produce considerable bias (in a warming direction).¹⁹

- The *source* of all the warming in Earth's atmosphere is the Sun, yet the official narrative ignores the effect of major fluctuations (over decades, centuries, and even millennia) in solar activity.²⁰ The energy received on Earth is driven by a process known as the *solar dynamo*, which converts kinetic energy within the Sun into electromagnetic waves. Its interaction with the Sun's differential rotation causes an (approximately) 11-year cycle in which the Sun's magnetic field reverses its polarity. (We see the effects as 'sunspots.') The magnitude of the effects of this process also varies on a longer timescale. From Earth's perspective, on this is superimposed another process whereby the distance between it and the Sun slowly varies over longer timescales. Recent work by Zharkova²¹ and colleagues has produced evidence that, having experienced a warming period for several decades, Earth is now in the early stages of a grand solar minimum that will last until approximately 2053.
- All the major oceans are subject to periodic oscillation in temperature and sea levels. El Niño/La Niña is the most well-known example, but others—such as the Atlantic Multi-Decadal Oscillation (AMO), which affects the climate of North America and Europe—are also important. In fact, climate records show a natural periodic variation at different scales which have been modelled successfully.²² Yet in the case of the models used to promote AGW there has been a *failure* to reproduce past observations when used to 'backcast' Earth's climate.
- The official AGW narrative overlooks the beneficial effects of rising temperatures and higher CO₂ levels. Heatwaves kill far fewer people than winter freeze-ups²³ and a warming Earth will prolong the growing season in cold latitudes. CO₂ is no deadly poison, but a wonderful natural fertiliser that increases the yield of the food crops. The preamble to Clintel's recent *World Climate Declaration* (WCD) states

CO₂ is not a pollutant. It is essential to all life on Earth. Photosynthesis is a blessing.

The authors of the WCD—some very eminent scientists among them—don't appear to have any religious convictions, but their choice of words is interesting.

• Nor should we forget that the Earth went through a prolonged cold period (the Little

20 The IPCC deliberately ignored the Sun, according to the late Dr Eigil Friis-Christensen, a leading geophysicist. He testified that "The IPCC refused to consider the Sun's effect on the Earth's climate as a topic worthy of investigation. The IPCC conceived its task only as investigating potential human causes of climate change." He was one of many former IPCC experts to criticize its methodology. See https://www.linkedin.com/pulse/20141117203605-53060352-how-to-talk-sense-about-climate-change.

23 For the most recent pre-Covid data on excess winter deaths in England, see <u>https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/</u> <u>excesswintermortalityinenglandandwales/2018to2019provisionaland2017to2018final</u>

¹⁹ This is clearly seen in the graphs presented at <u>https://clintel.org/new-presentation-by-john-christy-models-for-ar6-still-fail-to-reproduce-trends-in-tropical-troposphere/</u>. A possible reason for the persistent bias is suggested by Ross McKittrick, in pin-pointing a serious error in one of the founding papers on which climate modellers rely. For those technically equipped, his paper is online at https://link.springer.com/content/pdf/10.1007/s00382-021-05913-7.pdf.

²¹ See, for example, <u>https://arxiv.org/abs/2008.00439v2</u> and <u>https://solargsm.com/publications/</u>.

²² See, for example, N. Scafetta (2016) Problems in Modeling and Forecasting Climate Change: CMIP5 General Circulation Models Versus a Semi-Empirical Model Based on Natural Oscillations. *International Journal of Heat and Technology*, **34 (S2)**, S435-S442.

Ice Age) that ended less than 200 years ago. According to the UK Met Office, atmospheric CO_2 levels were about 280 ppm at the end of the 18^{th} century. It is the subsequent rise (it is currently a little over 400 ppm) that has prevented a new era of glaciation; were the levels to slip back below 260 ppm we could expect a significantly harsher and colder climate to reassert itself. (Below 150ppm no plants would grow and mankind would starve to death.) Happily, a study based on NASA's satellite data²⁴ has shown that

From a quarter to half of Earth's vegetated lands has shown significant greening over the last 35 years **largely due to** rising levels of atmospheric carbon dioxide.

This far outweighs a small (\sim 4%) increase in 'browning,' and this greening has occurred with almost no explicit attempts to encourage it.

 Many of the proposed measures for 'fighting climate change' are untested and require vast investment. Moreover, ironically, eliminating fossil fuels is quite infeasible: fossil fuels are still needed in order to make 'renewable' resources. Windmills need steel, and carbon (i.e., coal) is essential for making steel. Similarly, the manufacture of solar panels requires a high-temperature arc-furnace in which coal and quartz (both of which have to be mined) are fused together. Opponents of the 'net zero' agenda point out that in global terms British (or European) policies merely shift the generation of CO₂ to other parts of the world while causing hardship and impoverishment to their own citizens.

Consequences

5. The drive towards 'net zero' also has many potentially serious consequences, both for human lives and for the planet. Many of these are much too easily dismissed by those who promote the AGW narrative. For example:

- Energy security is a clear casualty of the switch to 'sustainable energy' which overwhelmingly means electricity, generated by means of biofuels, solar panels and wind farms. Unfortunately, such sources are intermittent. To take a recent example,²⁵ on 17 Feb 2023, wind accounted for 48% of electricity generated in the UK, on 22 Feb, just 22%; moreover, it being winter, solar is almost irrelevant at ~2%. As Sir David MacKay, FRS,²⁶ pointed out, even if we completely covered the windiest 10% of the UK with windmills it would produce (on average) less than half the electricity that was needed just to keep the public motoring at 2010 levels, to say nothing about all the other uses of energy. Without fossil fuels many nations will face a serious energy crisis.²⁷
- Wind and solar energy are at least more or less ubiquitous, but the technology that

²⁴ See <u>https://www.nasa.gov/technology/carbon-dioxide-fertilization-greening-earth-study-finds/</u>

²⁵ Such data are freely available at https://www.energydashboard.co.uk/historical

²⁶ MacKay was the Chief Scientific Advisor at the UK Dept of Energy, 2009-2014. Although he bought into the AGW narrative, his book *Sustainable Energy—without the hot air* (pdf freely available online) contains much commonsense that has unfortunately been neglected.

²⁷ The effects of the Russian invasion of Ukraine are currently (2023) providing a preview of some of these problems in Europe. In an interview with former Australian deputy premier John Anderson at

exploits these resources relies on large amounts of 'rare earth metals.' The International Energy Agency (IEA)²⁸ believes that there is a "looming mismatch between the world's strengthened climate ambitions and the availability of critical minerals that are essential to realising those ambitions." All producer technologies require copper, but wind power uses eye-watering amounts—for offshore wind, 8000kg of copper perMW (roughly 8 times as much as needed by natural gas generation), plus 5500kg of zinc and nearly 2000kg of manganese, chromium, nickel, molydenum and rare earth elements (REEs). Solar power is less profligate, but still requires significantly more critical minerals than gas, coal and nuclear.

- The position is little better at the consumer end. Electric vehicles (EVs) are supposed to be one of the main technologies²⁹ of the future, yet they also need large amounts of these minerals. On average an ICEV (internal combustion-engine vehicle) uses about 20kg of copper and 11kg of manganese. EVs need nearly 3 times as much copper and twice as much manganese, plus 130kg of nickel, cobalt, lithium, graphite and REEs. The National History Museum recently put this in perspective:³⁰ "to switch the UK's fleet of 31.5 million ICEVs to... EVs would... [require] ...*twice* the current annual world production of cobalt, an entire year's world production of neodymium and three quarters of the world production of lithium. To do the same worldwide would need forty times these amounts." Lithium extraction also requires vast quantities of water, and in some countries may drain and even poison natural aquifers for generations.³¹
- As well as incurring considerable extra cost (EVs cost roughly twice as much as their equivalent ICEVs), there are geo-political and ethical aspects involved in the switch to an electricity-based transport economy. Much of the necessary mineral supply is controlled by the Chinese Communist Party,³² as well as the manufacturing capacity: for example, China controls 97% of the world's solar panel manufacture.³³ Moreover, their solar industry is based in Xinjiang, the centre of the 'Chinese Gulag'—their system for enslaving Uighur Muslims for forced labour, organ-harvesting and 'reeducation.' The mining of critical minerals such as cobalt also raises ethical questions; many of the 'coltan' mines in central Africa involve child labour, exploitation and death.³⁴
- There are serious environmental aspects to the net zero agenda. Mining REEs causes significant pollution; extracting neodymium from its ore, for example, requires

- 30 See <u>https://www.nhm.ac.uk/press-office/press-releases/natural-history-museum-experts-make-case-for-mining-in-uk.html</u>
- 31 See <u>https://www.youtube.com/watch?v=nl0E-UhKB5E</u>
- 32 See <u>https://www.instituteforenergyresearch.org/renewable/china-and-the-rare-earth-supply-chain-policy-brief/</u>
- 33 See https://www.spectator.co.uk/article/china-is-trying-to-strangle-the-worlds-solar-panel-industry/
- 34 <u>https://www.theguardian.com/global-development/2019/dec/16/apple-and-google-named-in-us-lawsuit-over-congolese-child-cobalt-mining-deaths</u>; <u>https://www.abc.net.au/news/2020-03-01/tech-companies-rely-child-labour-abuse-to-mine-coltan-in-congo/11855258</u>

<u>https://www.youtube.com/watch?v=A638LdWWSbc</u>, the historian Niall Ferguson recently said that in his opinion Europe is already at the point of "self-immolation" in its attachment to `net zero' policies.

²⁸ See the IEA report at <u>https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions</u> from which the relevant figures have been extracted.

²⁹ Already 45% of the world's electricity is used to run electric motors, a percentage that widespread use of EVs will increase significantly

immense quantities of water and chemicals³⁵. Many REEs have radio-isotopes, so the waste is generally radioactive too. Some of the pollution is nearer to home: the claim that EVs reduce pollution is only true on the premise that CO₂ is a pollutant—the additional weight of EVs means they generate more particulate pollution from tyres and brake linings. Indeed, over a vehicle's life-cycle, EVs are on average more polluting than ICEVs.³⁶ Small wonder that Luca de Meo, CEO of Renault has called³⁷ EV batteries "an ecological disaster."³⁸ They also promise to be a significant fire hazard.³⁹

- Connected to the pollution question is the cost of recycling. Wind turbine towers are mostly steel; recycling *them* is not a major problem but for the other parts it is a different story:⁴⁰ the base of each tower is made of at least 1000 tonnes of concrete,⁴¹ which would have to be removed to restore land to normal agricultural use when the wind farm reaches the end of its useful life (currently around 20 years). The blades are an even bigger problem; they are made of toxic glass- or carbon-fibre composites, and it is very difficult to recycle them. Unlike the USA, which has large desert areas, the UK's landfill sites would be wholly inadequate.
- Recycling solar panels is also beset with problems.⁴² Average lifetime for photovoltaic arrays is about 25 years (some estimates are lower)—on current projections of installation rates, there will be globally nearly 80bn kg of highly toxic (lead, cadmium and chromium) waste from solar panels by 2050. The waste from the newer thin film cell technology will be even more toxic. There are methods of recycling solar panels, but they are expensive, and the temptation will be to resort to landfill, poisoning the ground for generations.

³⁵ Neodymium (Nd) is needed for strong permanent magnets, such as those used in wind turbines—700kg of Nd per MW generated.

³⁶ See https://www.sciencedirect.com/science/article/abs/pii/S0306261915000252?via%3Dihub. In life-cycle terms, apart from (allegedly) reducing CO₂ emissions, in most categories (e.g. human toxicity and terrestrial acidification, as well as particulates) EVs actually *increase* the overall burden on the environment. In London, this has recently been recognized by Westminster Council in moving to an 'emissions-based' parking charge—that is emissions over an EV's *lifetime*. People who believed the story that EVs were low- or even zero-emitting face a rude shock as the cost of parking for a day rises from about £2 to £37. See (paywall) https://www.telegraph.co.uk/news/2023/11/28/electric-vehicle-charged-extra-westminster-london/

³⁷ See <u>https://covexit.substack.com/p/renault-ampere-ceo-luca-de-meo#media-4e03aa1e-12bf-4a6b-bbb3-66c3e7295b41</u>. He does, however, see a possible rôle for small batteries in short-range city-cars.

³⁸ One example of the pernicious ecological effects of the attempts to address the 'climate emergency' can be seen at <u>https://www.bloomberg.com/features/2023-china-ev-graveyards/</u>. The film *Planet of the Humans* contains many more: see <u>https://www.youtube.com/watch?v=003RAWsQSeQ</u>. This documentary is interesting in that although it buys into the AGW narrative, it understands that so-called 'renewable' or 'sustainable' measures are creating their own ecological problems, and on a massive scale.

³⁹ See, for example, https://www.dailymail.co.uk/news/article-12951853/London-electric-bus-fire-two-buses-Potters-Bar-Sadiq-Khan.html, https://www.itv.com/news/westcountry/2023-10-05/family-of-five-loseseverything-in-devastating-fire, https://www.canberratimes.com.au/story/8436382/medical-staff-told-notto-charge-electric-cars-due-to-fire-risk/. One result is the rising cost of insurance for EVs, see https://www.which.co.uk/news/article/why-is-it-so-expensive-to-insure-an-electric-car-aVdwN5I8ko90

⁴⁰ See <u>https://www.instituteforenergyresearch.org/renewable/wind/the-cost-of-decommissioning-wind-turbines-is-huge/</u>

⁴¹ Incidentally, the manufacture of concrete (and thus each wind turbine!) requires large amounts of energy, and releases significant amounts of CO₂ into the atmosphere.

⁴² See, for example, <u>https://www.solarfeeds.com/mag/recycling-problems-with-photovoltaic-technologies/</u> <u>#Recycling_problems_with_PV_technologies</u>

These consequences are only a few of the planet-harming effects of `net zero.' We cannot belittle the problems associated with fossil fuels, and should acknowledge they have often been unnecessarily harmful, but by contrast they seem relatively benign.

Biblical Principles

6. This very brief survey leaves out several other questionable features of the official AGW narrative, but our main focus here is to ask what the Bible says. We must observe

first of all that many Christian environmentalists believe they can justify their participation in spreading the 'climate emergency' story from Scripture. In principle they are not wrong to attempt this; we should always bring Scripture to bear on any world-view. But this must be done with wisdom, for modern environmentalism is a world-view that in many respects is a version of paganism, where created things are deified. There are elements of this world-view that are clearly opposed to biblical truth.

7. We would not charge Christians with whom we disagree of accepting everything in that world-view. The question is, however, should we adopt a pick-and-mix approach of selecting parts of that world-view with which we are comfortable, retroactively seeking justification for them from the Bible? Rather, we should start from God's word to identify a theology of human/environmental interaction that will guide us when faced with some of the pressing issues associated with the official AGW narrative.

Creation

8. We are creationists, and we believe that unless we begin with God's revelation concerning creation, we are likely to go astray in facing current environmental questions. We recognize that even within the professing Church, we are in a minority; but it is precisely because of a lack of biblical understanding concerning the creation narrative in Genesis that others have failed to think through their adoption of pagan elements of modern environmentalism.

9. What then does Genesis teach us? The very first verse⁴³ points up the Creator's priorities: "In the beginning, God created the heavens and the earth." The whole vast (and —yes—unimaginably wonderful) universe beyond Earth is comprehended in one phrase: "the heavens." One small planet is singled out—our home. The atheist Carl Sagan once called it "an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe in which there are far more galaxies than people." Not so in God's eyes: "the heavens" do indeed declare His glory (Ps.19:1), but Earth is the particular stage on which He works out His purposes before angels and men. In the six days (Gen.1:3-31) that follow the *ex nihilo* creation we see how He gradually fills and orders the earth. What a contrast to the barren wastes of Mars as revealed by the five Mars Rovers! As the psalmist says (in Ps.104:24a) "How numerous are Your works, O Yahweh! In wisdom You have made them all." Calvin's commentary on this psalm suggests that in creation we see God "exhibited to us, as it were, visibly in a mirror."

10. It is clear, then, that Earth is indeed a special place. But even then it is in a sense only a means to an end—that of making creatures "in His image." The sixth day sees the creation of mankind and their placement (Gen.2:8) in the Garden of Eden—a special place

⁴³ In what follows, biblical quotations are from the Legacy Standard Bible unless stated otherwise.

within the special place. Starting from there Adam and Eve were to pursue God's commission (Gen.1:26-28) to "be fruitful and multiply and fill the earth and subdue it, and have dominion over" all that God had made.

Thus Isaiah (45:18) also makes a distinction between "the heavens" and Earth in God's purpose in making the world:

...Yahweh, who created the heavens (He is the God who formed the earth and made it; He established it and did not create it a formless place, but formed it to be inhabited)...

He formed Earth (and by implication, *uniquely* the Earth) "to be inhabited," to be a home for mankind, creatures made "in His own image" to care for this earth on God's behalf.

11. This is sharply at odds with modern environmentalism, whose world-view was famously expressed by a leading ecologist, the late Enzo Tiezzi, who said "Our error is to believe that the Earth is ours, when we are really the Earth's."⁴⁴ From his materialist presuppositions, if matter and energy are all there is, and they have given rise to humanity by a process of evolution, then mankind is indeed merely an artefact of Earth; it makes sense to say "we belong to the Earth." In contrast, however, the psalmist (Ps.24:1) says "the Earth belongs to Yahweh." And, as Moses implies (Gen.2:19-20a), it belongs also to Adam as God's vice-regent: note that Adam's first task is to name the animals—until then only God had named things (Gen.1:5,8,10). In that sense Earth *does* belong to mankind.

Rebellion

12. Gen.3 relates what Christian theology often calls the 'Fall' ('Rebellion' is a more accurate description). As a result mankind's relationship to God is fractured, the Earth is cursed and the original harmony between man and his environment is destroyed. Even worse, rather than a wise steward of creation, man becomes a tyrant who exploits the natural resources of the world that God has given him. The rebellion did not subside, but grew worse:

Then Yahweh saw that the evil of man was great on the earth, and that every intent of the thoughts of his heart was only evil continually. And Yahweh regretted that He had made man on the earth, and He was grieved in His heart. And Yahweh said, "I will blot out man whom I have created from the face of the land, from man to animals to creeping things and to birds of the sky; for I regret that I have made them." (Gen.6:5-7)

Gen.6-8 relates the story of the global flood that destroyed the world that then existed, including all humanity except for the family of Noah, and most of the animals. We cannot escape the fact that this was a case of God using a climatic event of staggering magnitude.

Providence and the Noahic Covenant

13. Following this, however, God made a covenant with Noah. He decreed (Gen.8:21b-22) that such an event would not happen again:

Yahweh said to Himself, "I will never again curse the ground because of man, for the intent of man's heart is evil from his youth; and I will never again strike down every living thing as I have done. While all the days of the earth remain, seedtime and

⁴⁴ A sentiment recently (Dec 1, 2023) echoed by King Charles III in his opening address at COP28.

harvest, and cold and heat, and summer and winter, and day and night shall not cease,"

a promise God then explicitly expressed to Noah (Gen.9:11), and pictured in the rainbow:

Indeed I establish My covenant with you; and all flesh shall never again be cut off by the water of the flood, and there shall never again be a flood to destroy the earth."

The original command to "be fruitful and multiply" is restated (twice: Gen.9:1,7). Moreover, mankind was given permission to eat flesh as well as plants, a provision that would amplify their ability to fulfil this command. The import of this covenant and its promise is that no Christian should fear that the means whereby the Son of God providentially sustains and "holds together" the world (Col.1:17) will fail.

14. Ironically, we see a concrete example of this fact in the very atmospheric processes which, in the official AGW narrative, are supposed to lead to runaway heating of the planet. In scientific terms, that narrative supposes that the greenhouse effect is a positive feedback loop: CO_2 increases, causing Earth to warm, causing CO_2 (and water vapour) to be released from the oceans, causing Earth to warm, and so on, *ad infinitum*. This has led to hysterical claims⁴⁵ that the "world will end in 12 years" or "we have 18 months to save the planet."

Yet atmospheric physics reveals how beautifully designed the process is. Michael Denton⁴⁶ explains:

If our atmosphere didn't absorb at least a significant fraction of the infrared radiation when the Sun was shining, the atmosphere would be intolerably hot during the day, and when night fell the temperature would plunge below zero. ...On the other hand, if our atmosphere absorbed too much in the infrared region, that too would be disastrous. And this highlights another intriguing element of fitness in the absorption pattern of electromagnetic radiation in the infrared region. The windows between the absorption peaks are as crucial as the peaks. Why? Because without some spectral windows, all the infrared radiation would be absorbed by the atmosphere, none could be radiated back out into space, and Earth would suffer a runaway greenhouse effect.

This is explained in much greater technical detail in the Happer/van Wijngaarden paper referenced earlier (para.4)—the fact that the absorption spectrum of the GHGs is non-uniform, being a composite of the spectra for each GHG. The existence of these "windows" means (in layman's terms) that a sizeable chunk (but not too much) of the heat received each day escapes into space each night, preventing a positive feedback loop. We could think of the atmosphere itself as a giant thermostat—another *negative* feedback loop—to maintain Earth's temperature within a relatively narrow "just right" range. Furthermore, as Happer and van Wijngaarden have shown from first principles, the thermostat is not *over*-sensitive to the level of CO_2 in the atmosphere: we could double current CO_2 levels and it would make only a small difference to the radiative transfer to space.

Why would we not see this as a case of God honouring the Noahic covenant? Recall what the psalmist says (Ps.111:2, 5b-6a, 7b-8a, 9b, 10):

⁴⁵ For example, (1) a news report: <u>https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report;</u> (2) a political speech: <u>https://www.realclearpolitics.com/video/2019/01/22/ocasio-cortez_the_world_is_going_to_end_in_12_years_if_we_dont_address_climate_change.html;</u> (3) a BBC article: <u>https://www.bbc.co.uk/news/science-environment-48964736</u>.

⁴⁶ See <u>https://evolutionnews.org/2022/05/earths-atmosphere-demonstrates-stunning-biocentric-fine-tuning/</u> Denton lists several other "fortuitous" facts or "coincidences" to be found in the composition of our atmosphere.

... Great are the works of Yahweh; they are sought by all who delight in them... He will remember His covenant forever. He has declared to His people the power of His works...All His precepts are faithful. They are upheld forever and ever... He has commanded His covenant forever...The fear of Yahweh is the beginning of wisdom.

It is noteworthy that v.2 (the opening words of this quotation) was chosen by the great Scottish scientist James Clerk Maxwell to be inscribed over the entrance to the Cavendish Laboratory in Cambridge in 1874. Maxwell would surely have appreciated this example of "the power of God's works" as well as His "everlasting covenant."

The Day of Judgment

15. There is one condition concerning the Noahic covenant, however, that God states in Gen.8:22 that Earth will not continue its regular pattern indefinitely, but only "while all the days of the earth remain." The Bible assures us many times that this world is moving towards judgment—a judgment that will include the existing cosmos, to be followed by its renewal (e.g., Is.65:17.).

Before this happens, there will be a climactic judgment by fire (Is.66:15-17). This is reiterated in the NT by the apostle Peter (2 Pet.3:6-7) who reminds us that this Earth itself will not remain forever. He informs us that just as in the days of Noah, when "the world at that time was destroyed, being deluged with water" so now

... by His word the present heavens and earth are being reserved for fire, being kept for the day of judgment and destruction of ungodly men.

In that great day all will be destroyed by fire:

...the heavens will pass away with a roar, and the heavenly bodies will be burned up and dissolved, and the earth and the works that are done on it will be exposed.

There is an interesting implication in the description of the day of wrath in Rev.11. God is praised for "destroying the destroyers of the earth"—the nations who had (in echoes of Ps.2) "raged" against Him. The current rage symbolized by "net zero" is certainly destroying the Earth, as described in section 5 above.

Stewardship

16. We live now in the interval between these two great judgments, and our task is one of stewardship. This means caring for the created world that is our home, using Earth's resources wisely and responsibly: their abundance is not a reason to waste them. That the human race has a poor track record in the use of God's gifts, such as fossil fuels, cannot be denied—especially in the wealthy and profligate West, where greed is not merely tolerated, but celebrated. Nonetheless, the old legal maxim applies: *Abusus non tollit usum*—Abuse does not abolish (right) use.

17. Environmental activists are certainly right to point to humanity's many failures to live up to the responsibility which God has placed upon us. But many of their own objectives do not reflect the Creator's design. Rather, they ignore the fact that God "set [Adam] in the garden of Eden to cultivate it and keep it" (Gen.2:15). As a result of the rebellion, that task became considerably harder, but the purpose remains. Earth is first and foremost intended to be a home for the human race, so that the most important use of the planet is as a source of food. Paul says that "if we have food and covering, with these we shall be content" (1 Tim.6:8).

Having said this, the Bible is also clear that there are right and wrong ways of fulfilling this mandate (see, for example, Is.28:23-29). Moreover, God also provides us with much more than the basic necessities: the Bible does not promote asceticism, so that there is a balance that the Christian must maintain. A little later, Paul also tells us that God "richly supplies us with all things to enjoy" (1 Tim.6:17). The problem arises out of our sinful natures, as was well-stated by the late Oliver Barclay:⁴⁷ there is a difference

between the created structures... on the one hand, which are themselves good, and on the other hand, our failure to use these gifts as we should.

18. God's providence extends to the whole of creation, as we see in Ps. 104, which recalls Noah's covenant; it gives us a word-picture of an ecosystem working in balance. Nor does providence relate only to animate life: Job 28 describes the mineral wealth that God had placed in the earth (Gen.2:11,12). All these things are reasons to praise God and thank Him. With the development of science we understand the details of God's design better than David or Job, thus we should also praise Him for fossil fuels and photosynthesis.

The Antithesis

Kuyper's Insights

19. Abraham Kuyper (1837-1920), the Dutch theologian and statesman, wrote extensively on the importance of developing a Christian worldview of human society: science, culture, economics, education, the environment, etc.⁴⁸ The human impulse to investigate the Earth and to develop its resources is good, and despite the Curse and mankind's sinfulness, some real and fruitful understanding can be obtained—even of such a complex non-linear system as the Earth's atmosphere. This is a result of 'common grace'—God's endowment of knowledge and understanding to all, and his restraining of sin and evil in order that this endowment should not be completely corrupted.

On the other hand, there is also a sharp 'antithesis' between Christians and those who remain in rebellion against God. This manifests itself particularly in relation to creation: *Abnormalists* asume that the present condition of the cosmos is different from what it was in the beginning. *Normalists* on the other hand, believe that everything results from an unbroken naturalistic chain of cause and effect.

21. The antithesis is clearly on display in much of today's environmental activism. The predominant worldview is naturalism: the assumption that nothing exists apart from what we can sense (see, touch, hear, etc), i.e., what can be subsumed under the heading *matter.* There is also, however, a growing tendency towards pantheism: the ascription of some sort of 'divinity' to the material world, as in James Lovelock's idea⁴⁹ of *Gaia*. That world includes humanity, which—whether on materialist/Darwinian or pantheistic principles —is assumed to be in an unbroken relation with it. Both assume the world is `normal', in the sense described by the Bible: ``...all continues just as it was from the beginning of creation" (2 Pet.3:4).

⁴⁷ Writing pseudonymously as A.N.Triton, *Whose World?*, IVP, Leicester, UK, 1970, p.13.

⁴⁸ In English, the most complete development of Kuyper's ideas are found in his *Lectures on Calvinism*, Eerdmans, Grand Rapids, MI, 1931.

⁴⁹ See https://www.nature.com/articles/d41586-019-01969-y

22. Another example of the antithesis is the attitude towards 'wildness.' After the Curse, some parts of Earth's surface are hostile to human existence and food production. There is also a tension between humans and animals that did not exist in the beginning. We would also quickly note here that wildness seems also to be in some sense necessary for the world as it is post-Gen.3: although living in wild areas is not (for most people) an option, there is also a sense of awe and wonder in visiting them that should awaken the *sensus deitatis* in every person⁵⁰ and make us aware of our complete dependence on God.

An overlooked promise by God to Israel after the Exodus was (if they were obedient) the elimination of wild beasts from the land (Lev.26:6)—later reiterated by the prophet Ezekiel (34:25). (It is also often overlooked that capital punishment for animals that killed humans was prescribed in the Noahic covenant.) Moreover, in Isaiah's vision of the new heavens and earth (11: 6-9; 65:17-25) the predator/prey distinction is abolished. In the modern era, however, predators are preferred to prey, even extending in some cases (not in the UK) to endangering human lives. Yet even here privileged birds and animals are protected at the expense of other species.⁵¹ Ironically, even proponents of these proposals admit that they will have serious deleterious effects on biodiversity and food supplies.⁵²

But to the modern environmentalist the hostility of the natural world to mankind is 'normal.' Indeed, the idea of subduing the earth and filling it is contrary to a culture in which 'rewilding'⁵³ has become a popular goal. For the environmental activist, wilderness will always trump farmland. A recent case in point is the desire of the National Trust to 're-wild' part of an estate in Northumberland.⁵⁴ Tracts of this estate were turned from wild moorland to productive farms by our forefathers in response to the command of Gen.2:15. Now farming will cease in order to "create increased nature connectivity..." All of this is of course funded by the taxpayer so as to "...combat the effects of climate change."

At the same time, productive land is being lost by the needs of our throwaway society, which generates vast amounts of waste. Ironically, some of the corporate bodies that are most vocal about 'climate change' are the biggest perpetrators: Amazon, for example, not content with covering large tracts of farmland in concrete to site their warehouses, were revealed⁵⁵ by ITV in 2021 to have 'recycled' millions of perfectly good items from their warehouses into landfill—including large quantities of plastics and toxic metals.

⁵⁰ The *sensus deitatis* (sometimes *sensus divinitatis*) in Reformed theology is that innate sense of God that exists in every man, according to the apostle Paul in Rom.1:19-20.

⁵¹ E.g., red kites in the UK: see https://www.spectator.co.uk/article/red-kites-should-never-have-been-reintroduced-to-britain/; or bear attacks in the USA: see https://www.fieldandstream.com/conservation/fatal-bear-attacks-2021/.

⁵² The most comprehensive analysis of the environmental and economic consequences of the AGW narrative is still Bjorn Lomborg, *The Skeptical Environmentalist: Measuring the Real State of the World*. Cambridge University Press, UK, 2001. At <u>https://web.uvic.ca/~repa/publications/REPA%20working%20papers/WorkingPaper2021-03.pdf</u>, another economist, Cornelis van Kooten, argues that the proposed climate policies "will harm the poor more than any policies ever conceived."

⁵³ See for example, <u>https://www.spectator.co.uk/article/the-problem-with-rewilding/</u>

⁵⁴ See https://www.conservativewoman.co.uk/national-trusts-insane-drive-to-make-farmers-extinct/

⁵⁵ See <u>https://www.itv.com/news/2021-06-22/government-confronts-amazon-directly-over-mountains-of-waste-itv-news-understands</u>

Atheistic Environmentalism

23. Modern men and women are largely in the position described by Paul in Rom.1:21:

even though they knew God, they did not glorify Him as God *or give thanks*, but they became futile in their thoughts, and their foolish heart was darkened. [emphasis added]

Giving thanks for God's providential gifts is the last thing on their minds. In fact, they are terrified by the good gift of carbon dioxide, and wish to purge it from the Earth. The rebellion of modern man goes beyond that, however. The psychologist Jordan Peterson has put his finger on the problem: "it's not that you love the planet, it's that you hate humanity."⁵⁶ This is indeed the position of many environmentalists, like David Attenborough⁵⁷, who regard humans as "intruders," as a "plague on the Earth." A movement called 'Birth Strike' is gaining momentum, its aim being that women should cease having children "because of climate change."⁵⁸ In several countries the idea of 'nature-rights' is already being implemented.⁵⁹

There is an undeniable spiritual dimension to modern environmentalism: if we refuse to subdue the earth as God intended, with mankind as God's responsible agents, the relationship is liable to be reversed. We will be found idolising 'Mother Earth' or 'Nature' as the supreme authority over human life.⁶⁰

Thus the environmental movement, which once focused on caring for creation—preserving endangered species, reducing pollution, protecting habitats, etc.—has degenerated into what the author Wesley Smith⁶¹ has called, with good reason, a "War on Humans." George Orwell in *Animal Farm* coined the slogan "four legs good, two legs bad" but he didn't envisage the 'two legs' willingly chanting it! That the denigration of humanity goes alongside the exaltation of wild animals is no accident. G.K.Chesterton pondered this connection in his essay *On Seriousness:*⁶²

I will not worship an animal. That is, I will not take an animal quite seriously: and I know why. Wherever there is animal worship there is human sacrifice. That is, both symbolically and literally, a real truth of historical experience.

24. The roots of this movement are not hard to discern. The Australian philosopher Peter Singer has articulated it unambiguously:⁶³

All we are doing is catching up with Darwin. He showed in the nineteenth century that we are simply animals. Humans had imagined we were a separate part of Creation, that there was some magical line between Us and Them. Darwin's theory undermined the foundations of that entire Western way of thinking about the place of our species in the universe.

⁵⁶ See <u>https://www.skynews.com.au/opinion/piers-morgan/its-not-that-you-love-the-planet-its-that-you-hate-humanity-dr-jordan-peterson/video/c7d5b581492ebe6da2bf0d73fec4360c</u>

⁵⁷ See https://www.sciencealert.com/the-time-david-attenborough-said-humans-are-a-plague

⁵⁸ See https://www.theatlantic.com/politics/archive/2021/09/millennials-babies-climate-change/620032/

⁵⁹ See https://evolutionnews.org/2023/12/mainstream-media-discover-nature-rights/.

⁶⁰ Note that the United Nations has recently established `International Mother Earth Day'—see <u>https://www.un.org/en/observances/earth-day</u>.

⁶¹ See W.J. Smith, *The War on Humans*, Discovery Institute Press, Seattle, WA, 2014.

⁶² G.K.Chesterton, *The Uses of Diversity*, Forgotten Books, London, UK, 2018 (reprint), p.3.

⁶³ J.Hari, "Peter Singer—An Interview," *The Independent*, Jan. 7, 2004.

This is as clear a statement of the antithesis as you could wish for.

Conclusion

25. We have pointed out that the current narrative for the existence of CAGW can be questioned at many points.

- Modelling processes are not well-understood, important effects are not wellspecified, statistical assumptions do not conform to reality, and the whole is subject to the vagaries of subjective tuning processes. Almost all models have failed the prediction test over the last 25 years.
- We believe that the evidence does not support the claim that the world faces a 'climate crisis' or 'climate emergency'—an unprecedented threat that requires extraordinary measures in order to reach 'net zero carbon.' Moreover, nearly all such measures have severe problems of their own; many, indeed, would make the situation much worse for the planet as well as humanity.
- We have stressed that a Christian response should be based on what God tells us in the Bible, including the original *ex nihilo* creation, human rebellion, God's judgments and His wise providential over-ruling in all things.
- We have also stressed human responsibility to care for creation as stewards uniquely made in God's image, including an attitude of thankfulness for the good gifts that God has provided in the earth. On the other hand we reject ideas and programmes that reduce humanity to the same level as the rest of creation.

Our position is well summed up by James Clerk Maxwell in the following prayer:

Almighty God, who created man in Thine own image, and made him a living soul that he might seek after Thee and have dominion over Thy creatures, teach us to study the works of Thy hands, that we may subdue the earth to our use and strengthen the reason for Thy service; and so to receive Thy blessed Word, that we may believe on Him Whom Thou hast sent, to give us the knowledge of salvation and the remission of our sins. All of which we ask in the name of the same Jesus Christ, our Lord. Amen.