Creation, preservation and dominion: part 3—a Christian approach to environmental issues

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The first paper in this three-part series discussed God's present work in creation and humanity's relationship with the created order. The second part expounded a Christian view of development and environmentalism. In this third and final paper, the ethics behind environmentalism are considered and a set of principles are proposed that can guide our decision-making when facing environmental challenges or when we are forced to compromise in relation to development projects and environmental issues. These ethical principles are then applied to a current environmental challenge: the perceived threat of "climate change".

When dealing with issues of development and environmental impact, we will always be faced with difficult and complex choices. There will always be a tension between our stewardship responsibility and our mission to resist the Fall. Our attempts to develop and improve our environment may be unsustainable in the long run or may result in unforeseen problems and unacceptable environmental damage.

It is imperative, then, that we develop an ethic for guiding what we do to the world that we have been charged with preserving and protecting. It is only with reference to such an ethic that we can make morally right and ethically sound decisions about how we change and develop our environment.

Environmental ethics

Ethics is concerned with what a person ought to do in any given situation. What, then, are Christians—as stewards of God's creation—to do in light of the environmental challenges we presently face? Clearly, we are to take care of creation, but that does not mean that industrial and agricultural development should be stopped or severely restricted. Nor does it mean that the needs of human beings should be subjugated to the desire to maintain a pristine environment.

With respect to the environmental challenges mankind now faces, and in our assessment of what is to be done, the following principles should be taken into account:

- 1. Is the problem empirically and scientifically verified? Is the perceived problem really a problem? Is the scientific and factual basis still in dispute?
- 2. Is the problem caused directly or indirectly by human action, or is it a result of natural processes?
- 3. Is the cost (in money and human life) of fixing the problem greater than the cost of coping with the problem?
- 4. Is the environmental impact or damage insignificant when compared with the overwhelming benefit it

90

provides to human beings? For example, if we build a powerstation that services a city of several million people, does it really matter, in the grand scale of things, if we destroy the habitat of some obscure bird or animal?

These principles are based on the Christian belief in, and respect for, objective truth, and that human beings are God's image bearers and the pinnacle of His creation.

Note also that these principles are somewhat utilitarian, i.e. guided by the desire to achieve the greatest benefit for the greatest number of people. However, in a fallen world where human beings still retain their God-given dominion, this is the best we can hope for until the return of Christ and the establishment of His kingdom.

Climate change

Today, we are told by many—scientists, economists and politicians—that the great environmental challenge of the present age is climate change. Thirty years ago, scientists were certain that the world was rapidly cooling, and the first Earth Day was celebrated on April 22, 1970, amid fears of a new ice age. Fortune magazine cited a number of leading climatologists who had concluded that global cooling was "the root cause of a lot of that unpleasant weather around the world", and that "it carries the potential for human disasters of unprecedented magnitude".1

Peter Gwynne wrote that there were ominous signs that the earth's weather patterns had begun to change dramatically and that these changes would result in a "drastic decline in food production—with serious political implications for just about every nation on Earth." He added:

"The evidence in support of these predictions has now begun to accumulate so massively that meteorologists are hard-pressed to keep up with it ... The central fact is that after three quarters of a century of extraordinarily mild conditions, the earth's climate seems to be cooling down. Meteorologists disagree about the cause and extent

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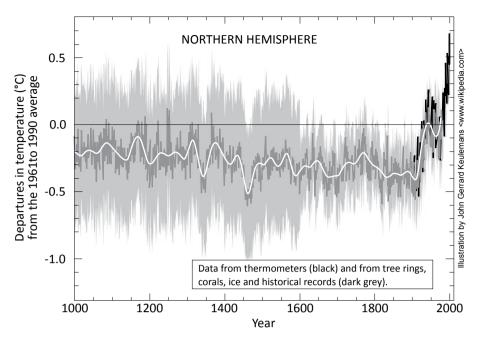


Figure 1. Michael Mann's influential hockey stick graph has now been thoroughly debunked and was not included the latest IPCC assessment report.

of the cooling trend, as well as over its specific impact on local weather conditions. But they are almost unanimous in the view that the trend will reduce agricultural productivity for the rest of the century. If the climatic change is as profound as some of the pessimists fear, the resulting famines could be catastrophic."²

At the same time, the National Academy of Sciences declared that "a major climatic change would force economic and social adjustments on a worldwide scale because the global patterns of food production and population that have evolved are implicitly dependent on the climate of the present century." Gwynne noted that climatologists "are pessimistic that political leaders will take any positive action to compensate for the climatic change, or even to allay its effects ... The longer the planners delay, the more difficult will they find it to cope with climatic change once the results become grim reality."

Today, the very same concerns are again being expressed, but in regard to the exact opposite phenomenon: global warming!

During the 1990s, some scientists and environmentalists suggested that the earth was in fact not cooling but warming, and that this warming was caused by a strengthened greenhouse effect that, in turn, was caused by the massive increases in carbon dioxide emissions from human industry and activity. In 2001, the Intergovernmental Panel on Climate Change (IPCC) released their Third Assessment Report. The IPCC Summary for Policymakers included a graph generated by Michael Mann and colleagues that appeared to show that the earth's climate was very stable

from 1000 to 1900, but then suddenly began to change, and temperatures in the northern hemisphere began to rise dramatically and continued to rise up until the present time. This graph became known as the "hockey stick" graph.³

The IPCC Summary claimed it is likely "that the 1990s has been the warmest decade and 1998 the warmest year of the millennium" for the northern hemisphere. As a result, many climate scientists, government officials, and media commentators became convinced that climate change or global warming was a very real and serious threat, and called for drastic reductions in carbon dioxide emissions. Given that modern society. industry and agriculture all require large amounts of energy generated by carbon dioxide producing processes, making significant cuts in carbon dioxide emissions is not easy. Indeed,

it would cause severe economic pain and lower everyone's standard of living.

Stephen McIntyre and Ross McKitrick have now thoroughly debunked the Mann hockey stick,⁴ and as a result, the graph was left out of the most recent 2007 IPCC Fourth Assessment Report. Nevertheless, its impact still persists. Moreover, NASA's updated surface temperature records for the USA (where most of the heavy industrialization has occurred) indicate that 1934 was the warmest on record, not 1998. The third hottest year on record was 1921, not 2006, and four of the top ten hottest years on record occurred during the 1940s before the large scale growth in carbon dioxide emissions. Moreover, several recent years (2000, 2002, 2003, 2004) are well down in the rankings, and 2004 falls behind even 1900.⁵

Nevertheless, there is still great pressure on governments and public policy makers to make drastic industrial, economic and structural changes in order to reduce carbon dioxide emissions. The Stern review on the economics of climate change suggested that climate change threatens to be the greatest and widest-ranging threat to the market ever seen. Its main conclusions are that 1% of global gross domestic product (GDP) *per annum* is required to be invested in order to avoid the worst effects of climate change, and that failure to do so could risk global GDP being up to 20% lower than it otherwise might be, and it provides prescriptions, including environmental taxes, to minimize the economic and social disruptions.⁶ Moreover, Stern declares that the required changes should be implemented immediately:

"The evidence shows that ignoring climate change will eventually damage economic growth.

Our actions over the coming few decades could create risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century. And it will be difficult or impossible to reverse these changes. Tackling climate change is the pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth of rich or poor countries. The earlier effective action is taken, the less costly it will be. At the same time, given that climate change is happening, measures to help people adapt to it are essential. And the less mitigation we do now, the greater the difficulty of continuing to adapt in future."7

The Australian Evangelical Alliance has also highlighted the supposed urgency and demanded the Australian government act now:

"But there is still time to avoid the top range of risk—provided that we do the necessary things and act immediately. As far as government policy is concerned that probably means establishing a clear policy framework for significantly reducing emissions by the end of the next parliamentary term. The scientific evidence which connects greenhouse gas emissions with climate change is the same evidence which indicates that the goal for developed nations ought to be in the order of a 60% reduction in greenhouse gas emissions from year 2000 levels by 2050. It makes no sense to accept the conclusions about the reality of climate change

UAH Globally Averaged Satellite-Based Temperature 1.2 of the Lower Atmosphere llustration by John Gerrard Keulemans <www.wikipedia.com> (Jan. 1979-Mar. 2009) 1.0 Atmospheric Warming (°C) 0.8 El Nino 0.6 Warming 0.4 0.2 0.0 -0.2 Mar. 2009: Mt. Pinatubo -0.4 +0.21 °C Cooling -0.6 81 83 89 91 93 95 97 99 01 03 05 07 09 YEAR

Figure 2. The dire predictions of global warming doomsayers are based on computer models. Yet these models did not predict what the actual temperatures indicate—that the earth has not warmed during the last decade, and in fact, has cooled slightly.

and not accept the conclusions about the necessary goals for rectifying it as they are based on the same evidence. Nor does it make sense to hold back from acting on this because of the fear it would have a damaging impact on Australia's GDP. A failure to act will cost even more in the long run and the use of fossil fuels (the major causes of human-induced climate change) is itself distorting the economy as it is highly subsidised through not being required to pay for its effects."

These calls for urgent action are based on what has become known as the "Precautionary Principle". Brian Edgar, the former Director of Public Theology in the Australian Evangelical Alliance, explains:

"In environmental matters this principle is well understood and frequently used. It was developed in Europe where it has been necessary to deal with serious environmental issues across national borders since the 1960's. It has also been enacted as an interpretive rule in numerous pieces of Australian legislation relating to the care of the environment. It says that where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing remedial measures. The rationale for this is that it is critically important to do our best for the environment because it is the only one we have got! Waiting for 100%, definitive, unambiguous certainty means not operating according to the best evidence but according to some far less likely evidence. It may mean waiting until after decisive and dangerous events have already occurred. It is a process which risks much and possibly achieves

little. When considering the devastating potential of climate change the high level of urgency can be matched with significant optimism, based on the fact that the worst scenarios can be avoided at relatively little cost. Changes in social and economic life will have to occur, but it makes no sense to hold back from acting sooner rather than later as a failure to act now will simply mean more cost in the long run. As it has been said, the economy is a wholly-owned subsidiary of the environment."9

On closer inspection, however, the Precautionary Principle makes little sense. One of the most basic principles of logic is that every effect has a cause. Yet the Precautionary Principle absurdly assumes that we can be absolutely certain of the effect, even though we are unsure about the cause. Furthermore, the claim that the cost of drastic action to reduce climate change is much less than the cost of not acting, is not only dubious in the extreme, it is totally myopic. Who exactly will be bearing this cost, and how much will it be? In western developed countries it will lead to a much lower standard of living and massive unemployment. In poor developing countries, it will prevent needed development and industrialisation, thus consigning another generation of people to a life of poverty and suffering, many of whom will die prematurely from a range of health problems. Moreover, the beneficial effects of climate change may, in fact, far outweigh any negative impacts. Suffice to say, this is a rather curious approach for an evangelical Christian group that supposedly cares about the poor, and values truth.

In fact, a number of Christian and other religious organisations have uncritically accepted the conclusions of the IPCC and other climate change alarmists.¹⁰ Typical of the responses by Christian organisations is the various articles by Brian Edgar for the Australian Evangelical Alliance. Edgar asserts:

"There is now no reputable science which denies either that climate change is happening or that a large part of global warming is human-induced. In 2001 the Intergovernmental Panel on Climate Change provided strong evidence of climate change, the warming of the earth and of the dominant role of human induced greenhouse gas emissions in causing this. But the extensive scientific research that has been undertaken since then is even stronger."

In another article, he writes:

"There is widespread scientific agreement on the basics of climate change—its causes and effects—although there is still vigorous debate about aspects of it. Whereas once one might have considered the minority opinion in the debate to be those who doubted whether it could be tied to human causes, the only minority now is comprised of those who think that the consensus position is too conservative and that even accepting a 2°C increase might be too much. A 1.7 °C degree may flip the global system into an uncontrollable mode of operation." ¹²

But Edgar's confidence in the certainty of humancaused climate change is misplaced. The claimed "scientific agreement" is not as "widespread" as Edgar suggests. Although most scientists agree that the earth's global average surface temperature has increased (by approximately 0.6°C) during the 20th century, many disagree that this is caused by human action, especially since much of that warming occurred before the advent of large scale industrialization (before 1940). Instead, they believe the warming is more likely to be part of a natural cycle. Furthermore, they note that rising temperatures may, in fact, result in far greater benefits to mankind, and that these benefits are rarely considered or taken into account by those who desire to reverse global warming. Indeed, over 31,000 scientists—including more than 9,000 with a Ph.D. (15 times more than the number involved in IPCC process)—have signed a petition pointing out these issues. This far exceeds the 41 scientists who wrote the IPCC Fourth Assessment Report, and the 2,400 "individual experts" that were sent a copy of the draft report to review.

In addition, an increasing number of experts have started speaking out against the catastrophic scenarios pushed by the IPCC and various other climate change alarmists. John Christy, Richard Tol, Richard Lindzen, Hans von Storch, Vincent Gray, Christopher Landsea and Paul Reiter were all contributors or reviewers to various IPCC working groups but do not agree with the IPCC's overall conclusion that human beings are warming the world. Landsea and Reiter have even resigned in protest. Vincent Gray is highly critical of the IPCC's procedures stating:

"Over the years, as I have learned more about the data and procedures of the IPCC, I have found increasing opposition by them to providing explanations, until I have been forced to the conclusion that for significant parts of the work of the IPCC, the data collection and scientific methods employed are unsound. Resistance to all efforts to try and discuss or rectify these problems has convinced me that normal scientific procedures are not only rejected by the IPCC, but that this practice is endemic, and was part of the organization from the very beginning ... The IPCC is fundamentally corrupt."

Furthermore, David Evans, who worked for the Australian Greenhouse Office from 1999–2005 admits:

"I devoted six years to carbon accounting, building models for the Australian Greenhouse Office ... It was great. We were working to save the planet. But since 1999 new evidence has seriously weakened the case that carbon emissions are the main cause of global warming, and by 2007 the evidence was pretty conclusive that carbon played only a minor role and was not the main cause of the recent global warming ... 1. The greenhouse signature is missing. We have been looking and measuring for years, and cannot find it ... 2. There is no evidence to support the idea that carbon emissions cause significant global warming. None ... 3. The satellites that measure the world's temperature all say that the warming trend ended in 2001, and that the temperature has dropped about 0.6°C in the past year ... 4. The new

ice cores show that in the past six global warmings over the past half a million years, the temperature rises occurred on average 800 years before the accompanying rise in atmospheric carbon. Which says something important about which was cause and which was effect."¹²

Yet global warming alarmists—including Christians—continue to propagate demonstrably false claims about the climate. Edgar, for example, agrees with the claim that "[t]here is great concern at the moment that the melting of Arctic ice is actually occurring at a greater rate than was projected in even recent assessments." Yet satellite pictures of the Arctic ice cap from July 2007 and July 2008 indicate that the polar cap has in fact slightly increased! Likewise, the Antarctic ice cap has also increased—to record levels!

In any case, it should be noted that carbon dioxide (as opposed to particulate carbon) is not a pollutant. Carbon dioxide is a naturally occurring gas that is an essential component of the photosynthetic process that causes vegetation to grow. The presence of additional carbon dioxide will stimulate plant growth, and the warmer weather means a longer growing season, and thus greater agricultural production. In fact, retreating ice and ground thawing would cause more arable land to become available for both residential and agricultural purposes. Indeed, those who argue that global warming will produce greater benefits to mankind point to the fact that the world has previously thrived during past warming periods, and that cold periods have always caused serious survival problems for all creatures including humans. Extreme cold always causes far more deaths than extreme heat. Furthermore, with most roads free from ice and snow, driving would be a lot safer. Rail and air transportation would also be far more efficient due to the reduction of weather-related delays and accidents. There would also be a significant reduction in energy use due to reduced heating requirements and less demand for the manufacturing of cold weather clothing.19

Yet this does not stop Edgar denouncing inaction as dangerous extremism, and demanding that we immediately take drastic steps to stop global warming. 12 Pope and Edgar argue that this naturally follows from our Christian faith because it means we are "genuinely loving our global neighbours through just, loving and sacrificial action (Matt. 22:34–40)."²⁰ But this is a rather curious position. Does the command to love our neighbours apply to everyone, or only those living in western developed countries? In fact, assuming that global warming is indeed caused by CO₃ emissions, and given that developing nations are by far the greatest emitters, are they not the chief cause of global warming and therefore guilty of harming not only their fellow global citizens but themselves? Pope and Edgar even acknowledge that "we cannot work on changing the climate for one part of the world and not another."20 They add that "it is no use trying to mitigate the effects of climate

change in one part of the world while continuing to promote it in another. That makes no sense."²⁰ Yet, this nonsensical approach is what they themselves are advocating!

In any case, Christians face a choice: to implement the drastic policies currently being advocated by those convinced that global warming poses a very real threat, or to wait and see and make adjustments and adaptations as the need arises. Carbon dioxide reduction policies require revolutionary changes to the way we generate energy. "Clean" renewable energy sources are inadequate sources of baseload power,²¹ so the only options are hydro-electric, nuclear and geothermal—all of which have other significant environmental impacts. Thus, to make any real difference, coal-fired power stations around the world will more or less need to be closed down, and millions of vehicles taken off the roads. This will, of course, have catastrophic effects on human civilization, and will inevitably lead to the suffering and death of millions of people. George Reisman explains the absurdity of such policies:

"If we destroy the energy base needed to produce and operate the construction equipment required to build strong, well-made, comfortable houses for hundreds of millions of people. we shall be safer from the wind and rain, the environmental movement alleges, than if we retain and enlarge that energy base. If we destroy our capacity to produce and operate refrigerators and air conditioners, we shall be better protected from hot weather than if we retain and enlarge that capacity, the environmental movement claims. If we destroy our capacity to produce and operate tractors and harvesters, to can and freeze food, to build and operate hospitals and produce medicines, we shall secure our food supply and our health better than if we retain and enlarge that capacity, the environmental movement asserts."22

If global warming is indeed the great threat that many claim, it would make more sense, and be more in line with our role as God's stewards, to take steps to cope with it when the need arises. Again, this would only be possible if human societies retain the ability to produce and to use energy in a way that is not crippled by the environmental movement and by government controls.²³

It should also be noted that the earth's biosphere has proven in the past to be remarkably resilient. This is an important point in light of the various doomsday scenarios that have been put forward by global warming activists. In the past, the earth has endured both long periods of warming and ice ages. It has endured meteorites strikes and massive earthquakes, yet here it remains with its human, animal and vegetable life still alive. Indeed, the earth has even recovered from the most catastrophic and devastating environmental disaster imaginable—a global flood lasting approximately one year, that at one point covered the entire surface of the earth, including the highest mountains!

Summary

Environmentalists, both Christian and non-Christian, seem far too eager to make radical changes in environmental policy without any careful consideration of the impact on the lives of the people affected of those policy changes. Their demands for urgent action irrespective of the cost, both financial and in human life, appear, in many cases, to be motivated by a sense of moral superiority. Such people appear to be more interested in *feeling* good than actually *doing* good!

Christians, however, should adopt a healthy Berean skepticism not only in relation to biblical preaching (Acts 17:11), but also in relation to scientific pronouncements. "Scientists say ..." is not the equivalent of "God says ...". Before we advocate for sweeping environmental law reforms and far-reaching public policy changes that will radically affect the lives of millions of people, we need to be sure that a problem really exists, what the problem is, and what caused it. It is only then that we are in a position to make an informed and careful decision on what to do. Given that we live in a fallen world, it may mean that some form of compromise is necessary. It may be necessary to damage a small part of the environment in order to extract or produce resources that benefit millions of people. It must ultimately be remembered that human beings are the pinnacle of God's creation, and the rest of creation stands in a subordinate relationship.

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