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Frequently Asked Questions About Global Warming

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There has never been much doubt that the release of carbon dioxide, a natural constituent of the atmosphere and a byproduct of fossil fuel combustion, has some warming effect on the planet. But the impact of man-made emissions of this greenhouse gas may be minor. The real issues are whether or not the release of carbon dioxide is a significant factor relative to natural temperature variability, what the likely consequences of warming would be, and what should be done about it. To better explain these issues, this paper provides answers to frequently asked questions about global warming.

Q: Is global warming unprecedented?

No. The earth's average temperature has increased over the last 30 years, and many point to this as evidence of a dangerous human-induced warming. But temperatures have risen and fallen many times before that. The Medieval Warm Period (c. 1100-1450) and earlier periods were likely as warm or warmer than the present. The earth was cooling as recently as the period from the 1940s to the 1970s, giving rise to fears of a coming ice age, until temperatures began to increase in the mid-1970s up through the present day. While it is likely that mankind's activities have made a contribution to warming, current temperatures are within the range of natural variability.

Q: Is global warming catastrophic?

Far from it. Given that the current upward trend in temperatures is not unprecedented, it stands to reason that minor warming will not lead to unprecedented catastrophes, and scientific evidence confirms this. According to recent research, the planet and its inhabitants are much more resilient to temperature variability than had been previously assumed, and the warming over the last few decades has not been particularly harmful to humans or the environment. Virtually all of the alarming rhetoric surrounding global warming is speculative and lies outside the scientific consensus. In fact, several respected economists believe that any likely future warming would have benefits (such as increased crop yields) that outweigh the modest adverse impacts in the U.S.

Q: Didn't global warming cause Hurricane Katrina and other natural disasters?

No. Natural disasters are just that, and occur with or without global warming. Many activists have tried to link each natural disaster as it occurs—hurricanes, heat waves, droughts, floods, wildfires, crop failures, disease outbreaks, and even snowstorms—to global warming. Although the theoretical link between warming and some natural disasters is plausible, the scientific evidence points away from anything more than a small connection. There is no consistent long-term pattern in the frequency of these events. For example, while Hurri-

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cane Katrina was part of a worse-than-average 2005 hurricane season, the 2006 hurricane season was an unusually weak one.

Q: Could the Kyoto Protocol or other measures to fight warming do more harm than good?

Yes. For example, consider hurricanes. Vast amounts could be spent trying to mitigate global warming as an indirect means of reducing future hurricane damage—even though there is no consensus about a global warming-hurricane link. The resources used in this effort would not be available for improvements in warning systems, flood control, building codes, evacuation plans, relief efforts, or anything else that could have actually made a difference with Hurricane Katrina. Also consider the one big success story in Katrina—the million or more people who got into the family car and drove out of harm's way in the days before the storm hit. If Kyotostyle energy restrictions had made automobiles and gasoline prohibitively expensive for some (as is very likely), more people would have been stranded in New Orleans and other coastal cities.

Q: Are we facing 20-foot sea level rise because of global warming?

This is highly unlikely and not part of any scientific consensus. In his book and documentary *An Inconvenient Truth*, Al Gore chose to focus on the catastrophic impacts of an 18 to 20 foot sea level rise, including numerous highly populated coastal areas falling into the sea. The recently released summary of the 2007 Intergovernmental Panel on Climate Change (IPCC) report, however, estimates a sea level rise of only 7 to 23 inches over the next century, and there are reasons to believe that even that may be overstating things.

Q: Shouldn't we "play it safe" and take tough preventive measures against global warming?

Not necessarily. There are risks to global warming, but there are also risks to global warming policies. Fossil fuels—coal, oil, and natural gas—provide the world with most of its energy. It will be costly to ratchet down emissions from fossil fuels enough to make even a modest dent in the earth's future temperature. The Kyoto Protocol, the multilateral treaty that places a cap on carbon dioxide and other green-

house gas emissions, will actually accomplish very little. If fully implemented, its energy rationing provisions could cost hundreds of billions of dollars annually but would, according to its proponents, avert only 0.07 degrees Celsius of warming by 2050. The costs of capping carbon dioxide are large and immediate, but the benefits are small and remote. And a poorer world, which Kyoto would give us, would have less ability to deal with whatever challenges the future brings.

Q: Wouldn't the costs of Kyoto fall on industry and not on the public?

The notion that the costs of rationing energy under Kyoto will be borne by a relative handful of corporate fat cats and that the rest of us will get a free ride is mistaken. Any measures strong enough to make a measurable dent in carbon emissions would have a profound effect on the economy and on family budgets. Electric bills and gasoline prices would rise, as well as the cost of most other goods which require energy to make and transport. Manufacturing jobs would likely leave the country in large numbers and go to nations like China that have announced that they will do nothing to cap energy use. At the very least, proponents of Kyoto and similar measures should be up front with the American people about the likely costs.

Q: Don't we owe it to the people in developing nations to save them from global warming?

First and foremost, the developing world needs to develop, not to adopt costly first-world environmental measures that would halt economic progress. The consequences of severe poverty are no less fearful than even the most far-fetched global warming doomsday scenarios. Energy rationing to combat warming would perpetuate poverty by raising energy prices for those who can least afford it. The last thing the 2 billion who currently lack access to electricity or safe drinking water and sanitation need are global warming policies that would place these and other necessities further out of reach.

Q: Isn't the Kyoto Protocol a success in Europe?

No. The European Union nations that have signed onto the Kyoto Protocol—and regularly criticize the U.S. for failing to join them—are falling consider-



ably short of its requirements. Despite the caps on carbon dioxide emissions, nearly every Western European nation has higher carbon emissions today than when the treaty was signed in 1997, and these emissions increases show no signs of leveling off. Compliance with Kyoto's looming 2008–2012 targets will be all but impossible for most of these countries, and many are actually seeing their emissions rising faster than those in the U.S.

Q: Is the U.S. doing nothing about global warming?

No. The current administration has taken a very sensible approach to global warming. Rather than engage in extremely costly efforts to reduce carbon dioxide emissions from existing sources, the administration has wisely steered clear of carbon caps. Congress has not ratified the Kyoto Protocol, nor has it (yet) enacted Kyoto-like programs to ration energy. Instead, Washington has focused on

research into new technologies that may be able to produce energy with fewer carbon dioxide emissions in a cost-effective manner. The administration's Climate Change Technology Program Strategic Plan describes the federal government's ongoing research efforts in this regard. And its six-nation Asia Pacific Partnership on Clean Development and Climate is an agreement by which both developed and developing nations can coordinate the creation and deployment of these technologies within the context of continued economic growth and poverty reduction. This approach will lead to economically practical solutions that could be employed if they prove to be necessary, rather than economically ruinous immediate measures imposed whether or not they are needed.

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