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What Every European Should Know About Global Warming

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Overview. Alarm over the prospect of the Earth warming is not warranted by the agreed science or economics of the issue. Global warming is happening and man is responsible for at least some of it. Yet this does not mean that global warming will cause enough damage to the Earth and humanity to require drastic cuts in energy use, a policy that would have damaging consequences of its own. Moreover, science cannot answer questions that are at heart economic or political, such as whether the Kyoto Protocol is worthwhile. This paper summarizes current genuine issues in global warming research and seeks to set the record straight on scare stories that have been exaggerated by the media and vested interests such as environmental pressure groups.

1. The Science

- There is no “scientific consensus” that global warming will cause damaging climate change. Claims that there is mischaracterize the scientific research of bodies like the United Nations Intergovernmental Panel on Climate Change (IPCC) and the U.S. National Academy of Sciences (NAS).
- Scientists do agree that: (1) global average temperature is about 0.6°Celsius—or just over 1°Fahrenheit—higher than it was a century ago; (2) atmospheric levels of carbon dioxide (CO₂) have risen by about 30 percent over past 200 years; and

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(3) carbon dioxide, like water vapor, is a greenhouse gas whose increase is likely to warm the Earth's atmosphere.¹

- Scientists do not agree on whether: (1) we know enough to ascribe past temperature changes to carbon dioxide levels; (2) we have enough data to confidently predict future temperature levels; and (3) at what level temperature change might be more damaging than beneficial to life on Earth.
- The NAS reported in 2001 that, "Because of the large and still uncertain level of natural variability inherent in the climate record and the uncertainties in the time histories of the various forcing agents...a causal linkage between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established." It also noted that 20 years' worth of data is not long enough to estimate long-term trends.²
- The temperature rise of 0.6°C over the last century is at the bottom end of what climate models suggest should have happened. This suggests that either the climate is less sensitive to greenhouse gases than previously thought or that some unknown factor is depressing the temperature.³
- Predictions of 6°C temperature rises over the next 100 years are at the extreme end of the IPCC range, and are the result of faulty economic modeling, not science (see economics section below).
- Both James Hansen of NASA (the father of greenhouse theory) and Richard Lindzen of MIT (the most renowned climatologist in the world) agree that, even if nothing is done to restrict greenhouse gases, the world will only see a global temperature increase of about 1°C in the next 50-100 years. Hansen and his colleagues "predict additional warming in the next 50 years of $0.5 \pm 0.2^\circ\text{C}$, a warming rate of $0.1 \pm 0.04^\circ\text{C}$ per decade."⁴
- Evidence from satellite and weather balloon soundings suggests that the atmosphere has warmed considerably less than greenhouse theory suggests.⁵ There is a disparity between the surface temperature measurements, which cover only a small fraction of the Earth but show sustained warming, and these measurements, which cover the whole atmosphere and show only a very slight warming.
- The NAS has confirmed this disparity as real.⁶ Recent studies analyzing data from the lower atmosphere suggest that temperature anomalies fall by altitude when greenhouse theory suggests they should rise.⁷
- New research also suggests that the role of greenhouse gases in warming has been overestimated, as factors like atmospheric soot,⁸ land use change,⁹ and solar variation¹⁰ all appear to have played significant parts in recent warming.

Specific Scare Stories

- Europe is not in danger of plunging into a *new Ice Age*. While research does suggest that the Gulf Stream has switched on and off in the past, oceanographers are convinced that global warming does not present any such danger.¹¹
- The world is not in severe danger from *sea level rise*. Research from Nils-Axel Mörner of Stockholm University demonstrates that current sea levels are within the range of sea level oscillation over the past 300 years, while the satellite data show virtually no rise over the past decade.¹² The IPCC foresees sea-level rise of between 0.1 and 0.9m by 2100. The Earth experienced a sea-level rise of 0.2m over the past century with no noticeable ill effects.
- Recent *extreme weather events* have no provable link to global warming. In fact, research by German scientists has demonstrated that the devastating floods in central Europe in 2002 were perfectly normal when compared against the historical record.¹³ Allegations that extreme weather has been more damaging recently do not take into account the fact that mankind is now living and investing resources in more dangerous areas. The World Meteorological Organization has acknowledged that increases in the recorded number of extreme weather events may well be due to better observation and reporting.¹⁴ A top expert from the IPCC resigned in January 2005 in protest that IPCC science was being misrepresented by claims that last year's hurricane season was exacerbated by global warming.
- Climate is not a significant factor in the recent growth of vector-borne diseases such as *malaria*. Most experts on this subject agree that other factors are much more important in predicting future spread of these diseases.¹⁵
- The *Pentagon* is not convinced that global warming represents a major security threat to the United States. The "secret paper" that garnered much publicity in Europe was a self-admitted speculative exercise that went beyond the bounds of measured research and had been released to the press long before the sensationalist stories surfaced in Europe. Nor did the paper recommend "immediate action" beyond better climate modeling.¹⁶
- The news that Oxford University has found that temperatures may increase by up to *11°C* severely misrepresents the scientific findings. According to the actual scientific paper,¹⁷ the frequency distribution of the results suggests that the lower end of temperature rises, in the 2°C to 4°C range, is the most likely.
- Claims that the scientific consensus is represented by a statement drafted by the Royal Society of London and signed by the *national scientific academies* of the G8 countries plus India, Brazil and China ignore the politicized nature of the statement. The climate change committee of the Russian Academy of Sciences says its president should not have signed the statement, while the use to which it

was put was condemned by the outgoing president of the U.S. National Academy of Sciences, Bruce Alberts, who called the Royal Society's presentation of the statement "quite misleading."¹⁸

Summary

There is scientific agreement that the world has warmed and that man is at least partly responsible for the warming—though there is no consensus on the precise extent of man's effect on the climate. There is ongoing scientific debate over the parameters used by the computer models that project future climatic conditions. We cannot be certain whether the world will warm significantly and we do not know how damaging—if at all—even significant warming will be.

2. The Economics

- Predictions of global warming catastrophe are based on models that rely on economics as much as on science. If the science of greenhouse theory is right, then we can only assess its consequences by estimating future production of greenhouse gases from estimates of economic activity.
- The economic modeling by the U.N. Intergovernmental Panel on Climate Change (IPCC) is badly flawed (*The Economist* called it "dangerously incompetent"), relying on economic forecasts that show much faster growth rates for developing countries than is justified.¹⁹ The IPCC economic scenarios show significantly greater economic development globally than other recognized, comparable scenarios.
- The Kyoto Protocol, most observers agree, will have virtually no effect on temperature increase, as it imposes no restrictions on greenhouse gas emissions upon major developing nations like China and India. These nations have publicly refused to accept any restrictions now or in the future.²⁰
- Greenhouse gas emissions derive from energy use which in turn derives from economic growth. Therefore, nations that restrict emissions are almost certain to reduce their rate of economic growth.
- European models of the effect of greenhouse gas emission restrictions (such as PRIMES) are sectoral models that look at the effects on only one economic sector and therefore badly underestimate the negative effects of emission restrictions on other economic sectors. General equilibrium models, which take into account the effects of emissions restrictions on other economic sectors, show much greater negative economic effects than sectoral models.²¹
- Recent research from general equilibrium models suggests strongly negative impacts on European economies from adopting Kyoto targets (or going beyond the targets, as in the case of the United Kingdom). One model shows the

economic effects by 2010 of adopting Kyoto targets as follows (remember that the Protocol achieves virtually nothing in reducing global temperature):²²

Germany	-5.2% GDP	-1,800,000 jobs
Spain	-5.0% GDP	-1,000,000 jobs
United Kingdom	-4.5% GDP	-1,000,000 jobs
Netherlands	-3.8% GDP	-240,000 jobs

- Kyoto targets are unrealistic. Regardless of announced targets, 11 of the 15 pre-enlargement EU countries are on course to increase their greenhouse gas emissions well beyond their individual Kyoto targets.²³

Specific Economic Issues

- It is not the case that *President Bush* has unilaterally held up ratification of the Kyoto treaty. The United States Senate must ratify any treaty signed by a President. In 1997, during Bill Clinton's presidency, the Senate (including recent Democratic presidential candidate John Kerry) voted 95-0 not to accept any Kyoto-style treaty that would significantly harm the U. S. economy and did not include participation by major developing countries.²⁴ The U.S. President has no power to impose Kyoto, or any other treaty, on an unwilling Senate.²⁵
- *Russia* agreed to ratify the Kyoto Protocol only after being pressured by the European Union, which held out the prospect of endorsing Russia's entry into the World Trade Organization. Both the Russian Academy of Sciences and several Duma committees reported that Kyoto has no scientific substantiation and may harm Russia's economy.
- The charge that global warming is *worse than terrorism* in terms of damage to the world is hyperbole. The implausible and unsubstantiable claim of many deaths each year—the figure is often put at 150,000—owing to global warming ignores the fact that most of those alleged deaths are due to diseases such as malaria, which have historically existed even in cold climates and could easily be controlled if the environmental lobby dropped its opposition to the use of DDT.²⁶ Moreover, that number is itself dwarfed by the number killed by poverty, which will be increased if the world decides to suppress the use of energy.
- Alternative sources of energy such as *renewables* are not yet cost-effective and come with environmental costs of their own (the veteran British environmentalist David Bellamy is leading opposition to wind farms).²⁷ The only currently cost-effective alternative to fossil fuel use is nuclear power, which environmental activists continue to oppose in direct contradiction to their assertions that global warming is the gravest danger the planet faces.
- “*Cap and Trade*” schemes that allow firms and governments to trade the right to emit greenhouse gases up to certain limits are not economically efficient. By

creating rent-seeking opportunities, they promote the development of a carbon cartel seeking to exploit the system to make profits. A simple carbon tax would be much more economically efficient, although likely to prove unattractive to voters in democracies.²⁸

Summary

Europe and the world face severe economic consequences from currently proposed strategies to deal with global warming. These approaches will produce job losses and consume scarce resources that could be better spent on handling other world problems such as AIDS or access to water.²⁹ The economic consequences of global warming mitigation strategies currently proposed will probably be worse than the effects of global warming itself. Therefore, adaptive and resiliency strategies should be considered as a more cost-effective alternative. In addition, “no regrets” strategies that will provide benefits from greater economic growth whether global warming proves to be a problem or not should be adopted at once.³⁰

Notes

¹ Professor Richard Lindzen, testimony to the United States Senate, May 1, 2001.

² Committee on the Science of Climate Change [Cicerone et al.], Climate Change Science: An Analysis of Some Key Questions, National Research Council, Washington D.C., 2001.

³ See testimony of Prof. Richard Lindzen to UK House of Lords Committee on Economic Affairs, January 21, 2005. Available at <http://www.publications.parliament.uk/pa/ld/lduncorr/econ2501p.pdf>.

⁴ Sun, S., and J.E. Hansen 2003. Climate simulations for 1951-2050 with a coupled atmosphere-ocean model. *J. Climate* 16, 2807-2826.

⁵ Christy, J.R., and R.W. Spencer, *Global Temperature Report: April 2003*, UAH Earth System Science Center, May 9, 2003, Vol. 12, No. 12.

⁶ Panel on Reconciling Temperature Observations, *Reconciling Observations of Global Temperature Change*, National Research Council, Washington DC, 2000.

⁷ Douglass et al. 2004. “Altitude Dependence of Atmospheric Temperature Trends: Climate Models versus Observation,” *Geophysical Research Letters*, Vol.31, L13208.

⁸ Sato, M. et al., 2003: “Global Atmospheric Black Carbon inferred from AERONET,” *Proceedings of the National Academy of Sciences*, vol. 100, no. 11: 6319-6324.

⁹ Pielke et al. 2002, “The Influence of Land-use Change and Landscape Dynamics on the Climate System: Relevance to Climate-change Policy beyond the Radiative Effect of Greenhouse Gases,” *Phil. Trans. R. Soc. Lond. A* (2002) 360, 1705-1719.

¹⁰ Friis-Christensen, E. & Lassen, K. 1991. “Length of the Solar Cycle: An Indicator of Solar Activity Closely Associated with Climate,” *Science* 254, 698-700; Thejil, P. and Lassen, K. 1999, *Solar Forcing of the Northern Hemisphere Land Air Temperature: New Data*, DMI-report #99-9, Danish Meteorological Institute, Copenhagen 1999.

¹¹ Weaver, A.J., and Hillaire-Marcel, C. 2004, “Global Warming and the Next Ice Age,” *Science*, Vol 304, Issue 5669, 400-402; Wunsch, C. 2004, “Gulf Stream Safe if Wind Blows and Earth turns,” *Nature* 428, 601.

¹² Mörner, N.-A. 2003. “Estimating Future Sea Level Changes from Past Records,” *Global and Planetary Change* 40: 49-54.

¹³ Mudelsee, M., et al., 2003. No upward trends in the occurrence of extreme floods in central Europe. *Nature*, 425, 166-169.

¹⁴ The Director of the World Climate Program for the WMO, Ken Davidson, replied to a questioner in Geneva in 2003, “You are correct that the scientific evidence (statistical and empirical) are (sic) not present to conclusively state that the number of events have (sic) increased. However, the number of extreme events that are being reported and are truly extreme events has increased both through the meteorological

services and through the aid agencies as well as through the disaster reporting agencies and corporations. So, this could be because of improved monitoring and reporting,” quoted at <http://www.john-daly.com/press/press-03b.htm> .

¹⁵ Reiter, P. et al, “Global Warming and Malaria, A Call for Accuracy,” *Lancet Infectious Diseases* 2004 Jun; 4(6):323-4.

¹⁶ Schwartz, P. and Randall, 2003, *An Abrupt Climate Change Scenario and Its Implications for United States National Security*, paper submitted to Pentagon October 2003. Available at http://www.ems.org/climate/pentagon_climate_change.html#report.

¹⁷ Stainforth, D. et al., “Uncertainty in predictions of the climate response to rising levels of greenhouse gases,” *Nature*, 433, 403-406.

¹⁸ Sam Knight, “Anti-Bush gibe by Royal Society sparks climate change row,” Times Online, July 5, 2005, <http://www.timesonline.co.uk/article/0,,22649-1681145,00.html>

¹⁹ Ian Castles, “Greenhouse Emissions Calculations Quite Wrong,” *Canberra Times*, August 29, 2002, available in Castles, I. & Henderson, D. 2003: “The IPCC Emission Scenarios: An Economic-Statistical Critique,” *Energy & Environment*, Nos. 2 & 3: 166-168.

²⁰ Cooler Heads Newsletter, Nov. 12, 2003. See <http://www.globalwarming.org/article.php?uid=233>.

²¹ Canes, M., *Economic Modeling of Climate Change Policy*, International Council for Capital Formation, October 2002.

²² Thorning, M., *Kyoto Protocol and Beyond: Economic Impacts on EU Countries*, International Council for Capital Formation, October 2002.

²³ Press Release, *EU15 greenhouse gas emissions decline after two years of increases*, European Environment Agency, 15 July 2004.

²⁴ S.98 Expressing the sense of the Senate regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations, 1997.

²⁵ U.S. Constitution, Article II, Section 2, Clause 2.

²⁶ Reiter et al.

²⁷ Schleede, G. 2004, *Facing up to the True Costs and Benefits of Wind Energy*, paper presented to the owners and members of Associated Electric Cooperative, Inc., at the 2004 Annual Meeting in St. Louis, Missouri. Available at <http://www.globalwarming.org/aecifa.pdf>.

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²⁹ See the work of the Copenhagen Consensus: <http://www.copenhagenconsensus.com>.

³⁰ See, for example, Adler et al., *Greenhouse Policy Without Regrets; A Free Market Approach to the Uncertain Risks of Climate Change*, Competitive Enterprise Institute, 2000.