

## **A Skeptic's Guide to *An Inconvenient Truth***

**By Marlo Lewis**

### **Executive Summary**

*An Inconvenient Truth* (*AIT*), Vice President Al Gore's book on "The planetary emergency of global warming and what can be done about it," purports to be a non-partisan, non-ideological exposition of climate science and moral common-sense. In reality, *AIT* is a colorfully illustrated lawyer's brief for global warming alarmism and energy rationing. It is a *J'Accuse* hurled at fossil-energy-based civilization, especially the USA, and above all the Bush Administration and its allies in the U.S. oil and auto industries.

We do not expect lawyers to argue both for and against their clients, nor do we expect balance from party men. However, although Gore reminds us (in the film version of *AIT*) that he "used to be the next President of the United States," and concludes the book and film with a call for "political action," he presents *AIT* as the work of a long-time student of climate science—and a product of meditation on "what matters." He thus asks us to expect more from him than the mere cleverness that can sway juries or win elections.

This reasonable expectation is unmet. In *AIT*, the only facts and studies considered are those convenient to Gore's scare-them-green agenda. And in many instances, Gore distorts the evidence he cites.

The present paper, a running commentary on *AIT*, finds that most of Gore's claims regarding climate science and climate policy are either one sided, misleading, exaggerated, speculative, or wrong. An extensive summary of *AIT*'s distortions is provided in Appendix A. Below is a list of 25 of egregious examples.

#### **One-sided statements**

- *AIT* never acknowledges the indispensable role of fossil fuels in alleviating hunger and poverty, extending human life spans, and democratizing consumer goods, literacy, leisure, and personal mobility.
- It never acknowledges the environmental, health, and economic benefits of climatic warmth and the ongoing rise in the air's CO<sub>2</sub> content.
- It neglects to mention that aggregate mortality and mortality rates due to extreme weather events declined dramatically during the 20<sup>th</sup> century.
- It neglects to mention the circumstances that make it reasonable rather than blameworthy for America to be the biggest CO<sub>2</sub> emitter: the world's largest economy, abundant fossil energy resources, markets integrated across continental distances, the world's most mobile population.
- The book impugns the motives of so-called global warming skeptics but never acknowledges the special-interest motivations of those whose research grants, direct mail income, industrial policy privileges, carbon trading commissions,

regulatory power, prosecutorial plunder, or political careers depend on keeping the public in a state of fear about global warming.

- *AIT* never addresses the obvious criticism that the Kyoto Protocol is all economic pain for no environmental gain and that regulations stringent enough to measurably cool the planet would be a “cure” worse than the alleged disease.

### **Misleading statements**

- *AIT* implies that, throughout the past 650,000 years, changes in CO<sub>2</sub> levels preceded and largely caused changes in global temperature, whereas the causality mostly runs the other way: CO<sub>2</sub> changes followed global temperature changes by hundreds to thousands of years.
- It ignores the societal factors that typically overwhelm climatic factors in determining people’s risk of damage or death from hurricanes, floods, drought, tornadoes, wildfires, and disease.
- It erroneously implies that a study, which found that none of 928 science articles (actually abstracts) denied a CO<sub>2</sub>-global warming link, shows that Gore’s apocalyptic view of global warming is the “consensus” view among scientists.
- It reports that 48 Nobel Prize-winning scientists accused Bush of distorting science, without mentioning that the scientists acted as members of a 527 political group set up to promote the Kerry for President Campaign.

### **Exaggerated statements**

- *AIT* hypes the importance and exaggerates the certainty of the alleged link between global warming and the frequency and severity of tropical storms.
- Claims polar bears “have been drowning in significant numbers,” based on an unremarkable report that four drowned polar bears in one month of one year, following an abrupt storm.
- Portrays the collapse in 2002 of the Larson-B ice shelf—a formation the “size of Rhode Island”—as harbinger of doom. For perspective, the Larson-B was 220<sup>th</sup> the size of Texas and 1/246<sup>th</sup> the size of the West Antarctic Ice Sheet (WAIS).
- *AIT* presents a graph suggesting that China’s new fuel economy standards are almost 30% more stringent than the current U.S. standards. In fact, the Chinese standards are only about 5% more stringent.

### **Speculative statements**

- *AIT* blames global warming for the record-breaking 37-inch downpour in Mumbai, India, in July 2005, even there has been no trend in Mumbai rainfall for the month of July in 45 years.
- It blames global warming for recent floods in China’s Sichuan and Shandong provinces, even though more damaging floods struck those areas in the 19<sup>th</sup>

and early 20<sup>th</sup> centuries.

- It blames global warming for the disappearance of Lake Chad, a disaster more likely stemming from a combination of natural regional climate variability and societal factors such as population increase and overgrazing.
- *AIT* warns that a doubling of pre-industrial CO<sub>2</sub> levels to 560 ppm will so acidify seawater that all optimal areas for coral reef construction will disappear by 2050—implausible because coral calcification rates have increased as ocean temperatures and CO<sub>2</sub> levels have risen, and today's main reef builders evolved and thrived during the Mesozoic Period, when atmospheric CO<sub>2</sub> levels hovered above 1,000 ppm for 150 million years and exceeded 2,000 ppm for several million years.
- It warns of “significant and alarming structural changes” in the submarine base of the WAIS, but does not tell us what those changes are or why they are “significant and alarming.” The WAIS has been retreating since the early Holocene. At the rate of retreat observed in the 1990s, the WAIS should disappear in about 7,000 years.
- It warns that “moulines”—vertical water tunnels formed from surface melt water—could cause half the Greenland Ice Sheet to break off and “slide” into the sea, even though the scientific study to which Gore alludes found that moulines increase glacial flow by only a few meters a year.

### **Wrong statements**

- *AIT* claims glaciologist Lonnie Thompson's reconstruction of climate history proves the Medieval Warm Period was “tiny” compared to the warming observed in recent decades. It doesn't. Four of Thompson's six ice cores indicate the Medieval Warm Period was as warm as or warmer than any recent decade.
- It claims the rate of global warming is accelerating, when it has been remarkably constant for the past 30 years—roughly 0.17°C/decade.
- It attributes Europe's killer heat wave of 2003 to global warming; it was actually due to an atmospheric circulation anomaly.
- It claims that 2004 set an all-time record for the number of tornadoes in the United States. Tornado frequency has not increased; rather, the detection of smaller tornadoes has increased. If we consider the tornadoes that have been detectable for many decades (F-3 or greater), there is actually a downward trend since 1950.
- It blames global warming for a “mass extinction crisis” that is not, in fact, occurring.

In light of these and other distortions, *AIT* is ill-suited to serve as a guide to climate science and climate policy for the American people.

## Introduction

More people will see the movie, *An Inconvenient Truth* (*AIT*), than will read the book. However, the two are so close in verbal content and visual imagery that, if you've seen the movie, you've practically read the book, and vice versa. Because it is much easier to reference pages in a book than scenes from a movie, this guide comments on the book version of *AIT*.

To minimize redundancy, the paper skips over introductory material that Vice President Gore develops in greater detail later in *AIT*. In most cases, passages from *AIT* are reproduced verbatim. In cases where passages are summarized, this will be clear from the context.

*AIT* does not have distinct chapters. To help the reader follow the sequence of topics under discussion, I divide the commentary into several sections. The commentary mostly follows the running order of Gore's presentation. However, to keep each section of the commentary focused on the same or similar topics, I have—in some instances—grouped together thematically similar but non-consecutive passages from *AIT*.

Some readers may wonder why I comment on almost every substantive statement Gore makes rather than just the key points or the dozen or so most egregious distortions. Why cover so many seemingly minor details?

Two considerations impelled me to take a comprehensive approach. First, anything less than a point-by-point examination of *AIT* is too easy to dismiss as cherry picking. After all, any non-technical treatment of complex scientific and economic issues is bound to be distorting to some degree. Confronted with a list of a dozen errors, or even two dozen, *AIT* apologists could accuse me of quibbling and plausibly claim that Gore's most important points (whichever ones I did not comment on) were correct.

Second, *AIT* makes a powerful impression on audiences chiefly by the sheer number of assertions it makes and images it presents. A typical audience reaction is to conclude that if even half of what Gore says is true, then the planet is in serious trouble. So I decided to take a leaf out of Gore's playbook. By the sheer number of errors and distortions I have uncovered, I hope to foster a healthy skepticism about Gore's bona fides as an authority on climate science, climate policy, and civic morality.