

Al Gore «An Inconvenient Truth»

This is available at www.BillHowell.ca along with other comments.

Versions: 18May07, initial draft 10Dec06

Red bold rows indicate serious problem with Gore's message

Blue italics means glitches/contention/better alternate explanation

Black normal is OK or mild alternate view.

Green means a point that has some fun/ interesting side stories (actually, most of this does!)

Timing from the start of the film is very approximate. Should add DVD "section" or chapter number as well.

Timing (hr:min:sec)	Gore comment/ message	Problem?
0:03:56	<i>Earthrise picture - first picture from space of Earth</i>	<i>absolutely NOT the first picture of Earth!! (satellites at many altitudes)???</i>
0:06:01	Grade school teacher - plate tectonics, science advisor in current admin	The point is a bit hypocritical as this theme includes Kyotoists' strenuously de-emphasizing or rejecting solar/ galactic ray drivers!! Gore does exactly this with this film! He doesn't even mention solar variability, Milankovich cycles etc, etc etc
0:07:49	atmosphere is so thin	
0:08:41	IR re-radiation from Earth trapped = global warming (traditional explanation)	H2O is by FAR the most important GHG (probably > 40 to 60% of the effect, and far more variable by geography/ season/ temperature than CO2). It is dysfunctional and/or delinquent and/or dishonest not to mention that (d-cubed thinking - and we're all guilty of this in my opinion)! Of course, the other "phases" of water (cloud reflection, precipitation, ice albedo) and the overall global water cycle as a primary heat transfer mechanism should NOT be ignored!
0:11:23	<i>Roger Revel - 1st person to measure CO2 in atmosphere, Gore's prof</i>	<i>CO2 was measured in 1800's, Arrhenius paper 1896. However, the modern trend may have been best illustrated by Revel - but he couldn't put it into full context.</i>
		Doesn't mention that Global cooling was the fear time of Richard Nixon
0:16:03	<i>Glacier retreats - Kilimanjaro, Glacier National Park, Columbian AK, Himalayas - water needed by 40% of world's popln., Alps</i>	<i>European glaciers haven't retreated as far as they did ?300 years? ago. It is d-cubed not to mention that, but for effectiveness in getting his point across, I understand, but don't entirely forgive.</i>
0:19:00	Ice cores	
0:19:28	Slight dips in past 1000 years, CO2 & T	He sure glossed over those blips, which are the dominant strong features in the last 1000 years. Wolf, Sporer, Maunder and Dalton minima. If you think global warming causes problems, wait until you see global cooling. Of course, historical facts actually show this relative importance.
	in	I missed some point here...
0:20:16	<i>Vostok - this presentation 1st time outside of small group of scientists people have seen this data</i>	<i>I doubt that his presentation was the first to non-scientists. This appeared in journals and presumably was veg ery widely reported in the media (eg Scientific American ~2003?), but it depends when it was made (perhaps just after Vostok ice core results were published late 1990s/early 2000s, or even before).</i>
0:21:01	in last 600 ky - CO2 has never gone above 300 ppm	Probably not true - for example, EPICA paper threw out « anomalously high values ». Fundamental problem of comparing different data sets, in this case possibly diffusion-averaged (85 to 3000 year averaging) with daily or annual measurements.
0:21:40	<i>« When there is more CO2 the temperature gets warmer »</i>	<i>Does not mention that the data are MORE suggestive of CO2(T) rather than T(CO2)!!! In other words, it is more likely that the opposite of what he is saying is true. But in any case it is irresponsible not to mention other possibilities.</i>

		<p>Added 18May07: Ernst-Georg Beck has shown that atmospheric measurements of CO2 since 1800 clearly demonstrate two major peaks well before today that were MUCH higher than today's CO2 levels. "Consensus Science" has ignored the atmospheric measurements of CO2 since 1800, and relies on ice core data that is known to have an 800 year lag (perhaps an 85 to 3000+ years range) at depth and is postulated to be affected by diffusion effects - ie temporal averaging!!</p> <p>If Beck's analysis proves out, there will be NO excuse for the UN-IPCC and its disciples!!!</p>
0:22:31	CO2 way beyond anything in the past - starts hoist explanation (maybe 5 * current levels?)	Very "dysfunctional and/or dishonest and/or delinquent" thinking (d-cubed, explained elsewhere). Gore glosses over the accepted estimates that CO2 was 10 to 50 TIMES higher in the past (?300 to 500 Myear ago?), but it was still mostly a great climate for life, and even during that time glaciatiion periods occurred!
0:24:15	It is unethical NOT to do something - but Congress didn't call for action	It is unethical to prevent others from expressing scientific reasoning or personal opinion (the latter if that is what you claim to support). It is very unethical to portray very good scientists and people as crooks and liars using contrived innuendo, especially when your own film tells big whoppers.
0:28:01	Last 150 years, always up (misses 1930-1979)	No - the trend is generally up, but with important bumps along the way. Gore hides the fact that solar correlates to T, CO2 does not, with some question about the last 20 years.
0:28:21	High temperature records all over the world	Some cities, areas are cooler. It's important to give perspective, even though the results look huge, the changes are not that big in T (as opposed to CO2) compared to the past 1000 years, negligible compared to big swings in past 600 ky
0:29:01	Natural ocean T variability	
0:29:36	Oceans warmer, stronger storms - Japan etc in ? 3005?, Brazil	Gore doesn't mention periods of high activity earlier in the century.
0:30:34	Katrina - due to global warming, this type of catastrophe will be more frequent	Disputable. With less of a delta_Temperature between poles and equator, perhaps the opposite will result. There are many other ways of looking at it, and the GCM models can be set to give you the answer that you want...
0:33:38	A period of consequences - in the past we could overcome mistakes	
0:34:11	Gore's results in Florida part of Presidential election	
0:36:28	Global warming - more precipitation but in big damaging events, chart of increases in floods	Look again at a longer-term chart. It may relate best to the solar cycle, with time lags and "constructive-destructive" periods where wind-ocean oscillations (El Nino, Pacific North American, Arctic, Quasi-Biannual) interact with solar cycle.
0:37:28	Droughts more frequent as well - Lake Chad in Africa	
0:38:38	Soil moisture evaporated out much more with global warming, Gore family farm	
0:41:12	Canaries in the coal mine - Ward-Hunt ice shelf in Arctic, drunken trees in thawing permafrost, pipeline structural damage, trucks in oil area in Alaska	Fascinating and great visuals.
0:42:38	Days of freezing - reducing over time. Release of confidential military arctic ice records.	Interesting. One scientist has pointed out the importance of correcting for Gregorian calendar change in the past. Submarine data release - hmmm... I'm sure other military powers will be able to use that!
0:44:01	Albedo - ocean versus glacier/ ice on sea	
	90% of sun's light absorbed in arctic ocean free water?	I wonder if the 90% at the equator still holds at high latitudes - angle of inclination.
0:45:11	Polar bears drown swimming in open water now (my pursuit of 1000 year memories)	Although Gore does comment about pine beetles etc moving North or to higher altitudes, it is curious that Kyotoists never mention the massive INCREASE in total life in some areas that are warming. Sure, there may be some species lost, but does the "new life" count for nothing?
0:45:37	Non-linear climate systems, sudden jumps - halocline of North Atlantic - Gulf Stream, ocean conveyor	

0:47:55	Ice dam & huge lake in North America - broke and stopped ocean conveyor, ice age in 10 years (Mercador distortion of Greenland's size)	
0:49:29	USA by far worse contributor to problem (EU, China, Russia)	
0:49:55	Bush, Senator against global warming issue	
0:51:06	Migration of birds, caterpillar availability - can't adapt	Pretty well all existing species have gone through much worse than the current swings, and many times over millions of years (just look at the glacial record over 600,000+ years!!)
0:51:46	Number of days without frost in southern Switzerland, pine beetle in USA, Alaska spruce trees	
0:52:35	vectors for infectious diseases, resistant diseases - west nile, avian flu	
0:53:21	coral reefs - species loss 1000 greater than background	
0:53:55	Antarctic ice shelf breakup - warning sign, 35 days disappeared, pools of melting water	
<i>0:56:04</i>	<i>Land glacier in Antarctic - raises sea levels when melts, islands being abandoned in consequence. One Antarctic ice shelf & Greenland would raise sea level 20 feet</i>	<i>Sea in geologic past (Phanerozoic 570 My) typically 200-300 meters higher, sometimes almost 600 m higher</i>
0:57:50	melt lubricates ice sheet - movements	
0:58:34	Blairs scientific advisor says maps of world will be redrawn, Florida, San Francisco, Netherlands, Beijing	
1:00:41	China - also faces global warming	
1:04:41	3 challenges: 1. population pressures natural resources, <u>30% of CO2 into atmosphere from burning (video time mark)</u> , 2 - science & tech revolution, old habits + new technology -> trouble Aral sea fishing fleet in sand,	I'm glad to see the population pressure issue on the table. Trouble is, Gore and most of the rest of Western society would object strenuously to any real attempt to manage population. China seems to be the only modern example that I can think of where definitive policies were put in place (luckily for the rest of us) and look what people think of that!
1:07:37	USA highest per capita (Canada!!)	
1:08:02	frog in slowing warming water - like our collective «nervous system»	
1:09:00	Gore tobacco farm, Nancy was nanny died of cancer, human nature to take time to connect dots	
1:11:37	3 misconceptions	
1:11:51	no lack of consensus every article last 10 years 928 articles, zero didn't think was a	
1:12:16	misconception created by a small number of people - oil companies, doubt is our product	The oil industry was important in countering the "excessive zeal"(d-cubed thinking gone amok) by the electric vehicle groups. I like electric vehicles and would like to see more of them, but only where they make sense. Don't exaggerate/lie to people about their capabilities and their environmental benefits. It is the same with climate change - history proves that it is a very serious issue, but don't use conspiracy theories and put down good people to sell your cause.
1:13:00	all articles in popular press, 1/2 said may not be a problem	
<i>1:13:36</i>	<i>API - oil & gas lobby</i>	<i>yes -but API is also an important professional organisation (engineering standards etc)!! www.api.org/aboutapi/</i>
1:14:41	innuendo of science fraud	Disease of “conspiracy theory” is fundamental across domains. Of course, if you don't nail cheats to the wall, they dominate, but at times the natural tendency to see conspiracies everywhere destroys decent people and causes more damage than the disease.
1:14:53	scientists ridiculed, deprived of jobs - because facts led to inconvenient truth	

1:15:28	EPA ?director? edited memo, without scientific training, resigned then worked for Exxon-Mobile, salary depends on his understanding something	Here's irony and hypocrisy wrapped together. The United Nations International Panel on Climate Change (UN-IPCC) rewrote scientists material, and misstated their conclusions, and persistently maintained the facade (this involves the "fabricated unanimous consensus" theme too). There is still a persistent, long-term and deliberate mis-portrayal of science by Kyotoists and some skeptics as well.
1:16:35	2. Do we have to choose between economy & environment?	
1:17:51	doing the right thing creates jobs	
1:19:31	Gore communicates gravity, city by city only way he knows, faith enough minds will change	
1:20:12	Car mileage in China vs USA, decline of USA industry	
1:22:00	<i>Humanity knows how to solve global warming challenge</i>	<i>Not within Kyoto timeframe/targets!!</i>
	Carbon capture & sequestration... not big enough of a savings ?	
1:23:21	Individual choices can help - CAN BRING THEM TO ZERO?	
1:23:37	USA & Australia didn't ratify Kyoto, US states taking initiative	
1:24:28	Americans historically can rise to challenges	True, but is political correctness finally going to stifle American innovation and vision as it does most of the rest of the world?
1:24:41	smallpox, polio brought down communism	See my zany, fun presentation "Ring around the rosies" on my website somewhere.
1:25:37	<i>CFC phaseout</i>	<i>As I had suspected for some time, it apparently is becoming more clear that the ozone hole and thickness high in the atmosphere is a function mostly of solar activity. Perhaps we'll find out that the CFC craze was baloney as well. Did anybody apologize for this? Did a whole pile of scientists, environmentalists lose their jobs? Something may be amiss here..</i>
1:26:49	Earth is our only home	I guess! <grin>
1:27:10	<i>I believe that this is a moral issue.</i>	<i>This is much more of an issue of a "Science Cult of the Kyoto Premise" than morality. It is important to study this, it is also important to keep things in perspective and really consider good science, and well-supported alternate viewpoints.</i>
1:29:01	The climate crises can be solved	
	www.climatecrises.net	

References - see written accompaniment