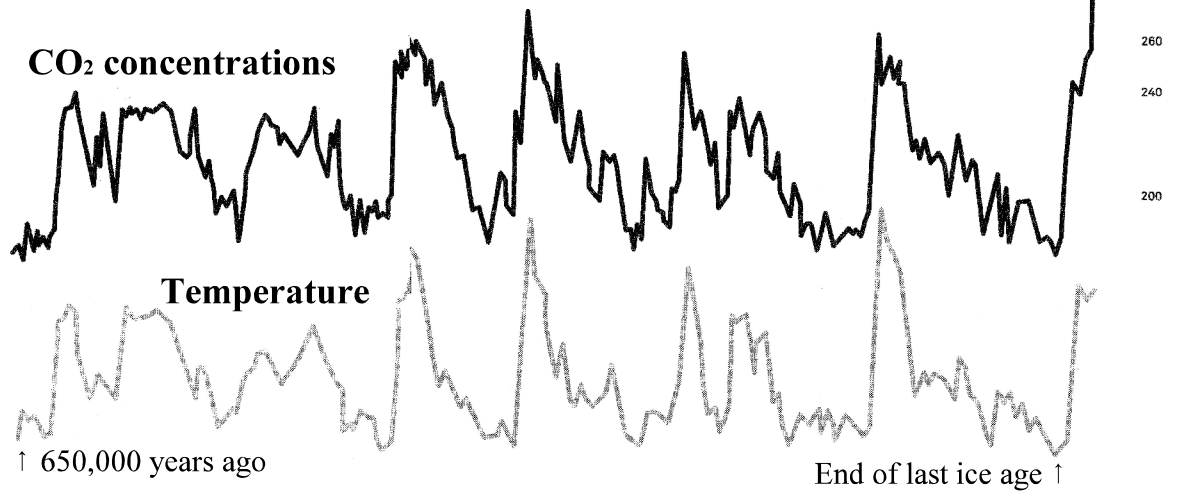


What Is The Problem?

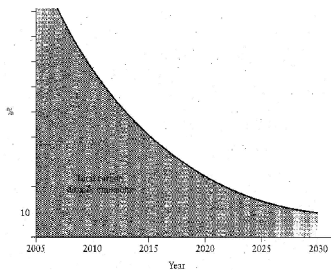
This graph is from Science Magazine, Tiny Bubbles Tell All. November 25, 2005: Vol. 310 No. 5752 pp 1285-1287 available at www.sciencemag.org/cgi/content/summary/310/5752/1285 or 1-202-326-6417 or a library. The graph is also found in the book and DVD An Inconvenient Truth, Al Gore. See www.climatecrisis.net

“Most scientists agree there is a 20 to 80% chance that **the bottom line (temperature) will rise with the top line (CO₂)** and our planet Earth will become too hot to support most life forms. With less than a 1% chance that your house will burn, you get insurance.” V. Khosla See www.khoslaventures.com



In 2005, the Joint Science Academies of Canada, Brazil, United States, China, France, Germany, India, Italy, Japan, Russia, and the UK wrote, “Carbon dioxide can remain in the atmosphere for many decades. Even with possible lowered CO₂ emission rates we will be experiencing the impacts of climate change throughout the 21st century and beyond. Failure to implement significant reductions in net greenhouse gas emissions now, will make the job much harder in future.” See www.nationalacademies.org/onpi/06072005.pdf

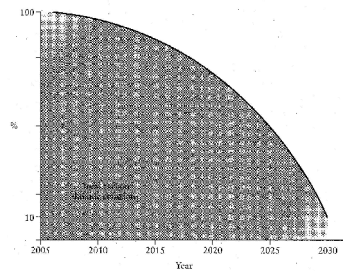
In 2007, United States Climate Action Partnership (GE, Alcoa, BP America, Caterpillar, Duke Energy, DuPont, and several others) wrote: “the scientific understanding of climate change is now sufficiently clear to justify nations taking prompt actions.” See www.us-cap.org “Each year we delay action to control emissions increases the risk of unavoidable consequences that could necessitate even steeper reductions in the future, at potentially greater economic cost and social disruption. Action sooner rather than later preserves valuable options...”



Fast CO₂ reduction = LESS TOTAL CO₂

The earlier reductions of CO₂ are critically important for total CO₂ reductions. In “Heat: How To Stop The Planet From Burning”, George Monbiot shows how we need and can do a 90% reduction in CO₂ emissions by 2030 to avoid the unimaginable for the future, but only by acting immediately. See: www.monbiot.com/archives/2006/11/07/heat/ and www.monbiot.com/archives/2006/10/31/heres-the-plan/

(Excerpted from *Heat: How to Stop the Planet from Burning* by George Monbiot. Copyright © 2006 George Monbiot. Reprinted by permission of Doubleday Canada.)



Slow CO₂ reduction = MORE TOTAL CO₂

“Except for giant meteorite strikes or other catastrophes every 100 million years or so, Earth has never experienced anything like the contemporary human juggernaut.” (p84 The Creation: An Appeal To Save Life On Earth by E.O. Wilson 2006) “ From excess CO₂ and species’ habitat destruction, by 2050, 25% of now alive species will be extinct and 50% will be extinct by 2100, at current rates. Land and sea, animal and plant species are experiencing the same fate.” (E.O. Wilson, CharlieRose interview, Dec06)

“Blame for global warming placed firmly on humankind” Feb.2, 2007.

See: <http://environment.newscientist.com/article/dn11088-blame-for-global-warming-placed-firmly-on-humankind.html>

Yet still, “How often do scientists have to remind the media that a handful of cherry-picked studies does not amount to the refutation of an entire discipline?” See: www.monbiot.com/archives/2007/01/30/another-species-of-denial/

What Can I Do To Lessen CO₂?

Remember: Every little bit less helps & speak up!

At Home You can lessen your CO₂ output and lower your bills by more than 30%.

- ~ **Before buying/doing one more thing for your home**, check <http://www.energystar.gov/> or <http://oee.nrcan.gc.ca/energystar/>
The sites are treasures of ideas for saving money/energy. Replace old fridges. Front load washers are way more efficient.
- ~ **Replace one regular incandescent light bulbs with a compact fluorescent** that uses about 75% less energy and save about 70 kilograms(kg)/150 pounds(lb) of CO₂ a year per bulb replaced.
- ~ **Move your thermostat down 1°C/ 2°F in winter and up 1°C/2°F in summer** and save about 900 kg/2000 lb of CO₂ a year, and you probably will not notice a difference.
- ~ **Clean or replace filters on your furnace and air conditioner.** A clean air filter can save 160 kg/350 lb a year, as well as cut down on allergens.
- ~ **Use less hot water.** Install a low-flow showerhead (saves 160 kg/350 lb per year) and wash your clothes in cold or warm water (saves 225 kg/500 lb per year). Use washer only when full.
- ~ **Turn off and unplug electronic devices.** Simply turning off your television, DVD player, stereo, and computer when you're not using them will save thousands of kilograms/pounds a year. If not using them for awhile, unplug things like hair dryer, cell phone chargers, or anything with a remote, like the TV off at the wall. The energy used to keep memory chips working accounts for 5% of total energy used and spews 18 million tons into the atmosphere every year!
- ~ **Get a home energy audit and switch to green power when available.** Many utilities offer free audits to find where your home is poorly insulated or energy inefficient. You can save up to 30% off your energy bill and 450 kg/1000 lb of CO₂ yearly. Request switching to energy generated by clean renewable sources such as wind or solar, whether or not it is available yet.
- ~ **Recycle more.** Save about 1100 kg/2400 lb of CO₂ yearly recycling half your household waste. Try to get your local government to encourage recycling financially.

On the Road One third of CO₂ emissions come from cars, trucks, and airplanes.

- ~ **Turn off vehicles not moving.** This will avoid making tons of CO₂ every year.
- ~ **Reduce your mileage.** Avoiding just 16 kilometers(km)/10 miles(mi) each week would eliminate about 225 kg/500 lb of CO₂ a year! Combine errands. Walk/bike local errands. **Fly way less, if at all.** A jet plane appears to do far more damage/person, even at full load, than most land vehicles for each mile or km covered and we know how many km/mi planes cover. **Car pool** and stop tons of CO₂ daily.
- ~ **Keep your vehicle tuned and your tires properly inflated.** When just 1% of car owners properly maintain their cars, nearly a billion pounds of CO₂ are kept out of the atmosphere. Properly inflated tires can lessen gas use more than 3%.
- ~ **When it's time for a new car, choose a fuel efficient one.** You can save 1400 kg/3000 lb of CO₂ every year if your new car gets only 3 miles per gallon (mpg) more. Hybrids get up to 60 or 70 mpg or 4 L/100 km. For enviro-friendlier vehicles check: <http://www.epa.gov/autoemissions/> You may also find the fuel consumption and general purpose converter at: www.members.optusnet.com.au/ncrick/converters/fuelcons.html helpful.

At Work ~ **Walk or bike to work and lunch.** Try to work from home. Pass these ideas along. Get more ideas at www.climatecrisis.net, www.pembina.org, www.newscientist.com, www.nrdc.org/, www.greenlearning.ca
Tell your Federal, Provincial/State, and Local representatives to ACT NOW.

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What Can I Expect My Reps To Do?

General

- To be aware how their personal actions** set the guide for all of us to follow in this.
- To implement a top priority plan for widespread awareness** of the well defined problem and solutions.
- To not play politics**, but expedite cooperation with all groups to avoid future unnecessary social instability.
- To re-evaluate** how and if achieving existing priorities and policies is congruent with newly uncovered realities.
- To establish systems to evaluate** all solution initiatives, with rapid feedback for learning and adaptation.

Local: To think Planet and act here/now.

- To review** the first two pages of this document. A citizen requests this review with a note saying, “My hope is that, once you’ve reviewed and considered the attached, you might pass it on to each council member for their review and consideration.” You might add a note about the helpfulness of reading it with web-access and a good Reader.
- To develop** a garbage billing system to encourage household recycling and sharing of related information.
- To initiate** an electronic car pool and other measures approaching the ideal. See <http://www.ecocitybuilders.org/>
- To replace** the current wasteful public streetlight lights with CFL-like lights **now**, or do without until possible.
- To motivate** local innovative efforts with serious rewards for home-grown “cool” ideas, for each age group.

Provincial/State and National/Federal: To think Planet and act here/now.

- To expedite recycling** with a view to wasting no material, by legislating that any sellers of any type of goods-including packaging (GIPs) be required to accept back all used-up or unused portions of those GIPs and ensure they are recycled **completely**. The transport system that delivers the GIPs is used to remove to recycle locations beside supply houses.
- To regulate now** that, where there are Compact Fluorescent Lights (CFL) available in brightness ranges, any store must sell only those CFLs in those ranges and not the extremely inefficient incandescent lights. To ban other wasteful lights too.
- To require all** frozen and cooled food display cases to have doors of a minimal thermal resistance. A huge wastage of energy comes from the battling of heating and cooling systems. Retail wastes 5 times warehouse systems. Move to latter.
- To rapidly lower** Green House Gas (GHG) emission maximums for all industries and for all types of vehicles (cars, trucks, and airplanes), as well as all heating and cooling systems. Remove loopholes & ban low mileage/person vehicles.
- To introduce new** building and renovation specifications approaching the German Passive House standard. Before renting out, require landlords to meet the new standards. Those with fewer means to upgrade need help.
- To decongest** transport congestion and stop unsustainable expansion of current GHG emitting methods by doing a **complete rethink** of transport systems, **not expanding** them, including urban, inter-urban, roads, rails, air, and sea. Promote developed plans internationally.
- To check www.fiscallygreen.ca for strategies** to use to encourage everyone to become more “aware”.
- To legislate that ethanol** must be made from mostly inedible substances like grasses. To encourage ethanol production from edible sources is to drive up the prices for those edible foods and literally cause the world’s currently less fortunate to starve, as fixed foreign aid dollars shrink in their hands. **To develop** related Planetary guidelines and promote them quickly.

National/Federal and Planetary: To think Planet and act here/now.

- To maintain and extend**, as realities permit, optimal respect for human freedoms between and within groups.
- To preserve** domestic natural plant and animal **habitats**, land and sea, **and aggressively promote expanded protections** for the critically important Hot Spots of the Planet. See E.O.Wilson references, PAGE 1.
- To request for proposals immediately**, for the use of Planet-wide large scale renewable energy programs, such as massive off-shore wind farms, wherever the winds are most constant, and massive desert solar farms as close to the equator as possible, both of which could utilize the very efficient long distance DC lines. These renewable energy sources could replace our current high GHG emitting non-renewable energy sources, preserving non-renewables for longer term needs.
- To quickly facilitate** development of hydrogen technologies and hydrogen transport lines for home heating.
- To require gas stations** to exchange batteries and recharge them via the DC lines. See Monbiot references, PAGE 1.
- To resolve**, with all other National Reps, **to set and keep** strict Planet carbon reduction cap targets, approaching 90% by 2030. **To fairly distribute** the national apportionment, about 60% of which would determine personal caps on carbon use allowances. The remaining 40% to be auctioned off to companies, **creating very powerful incentives** for low-carbon technologies. This system is fair and eliminates a nightmare of regulatory minutia. The very micro-regulation implied in some of the above boxes might be eliminated soon, when this carbon cap system is operational Planet-wide.
- To put systems in place** to ensure personal caps are kept and traded fairly.