Global Warming Revisited:
Recognizing the Universal Systems of Nature that Governs the Earth

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Some things bear repeating because they are well researched scientific assessments on the issues of global warming and the consequences of human ego and human behavior engendered by that ego.

In August 2000, the Traditional Circle of Elders and Youth delivered a Communiqué to the religious leaders of the world hosted by the United Nations in New York. The Communiqué, titled "The Ice is Melting in the North", (http://www.twocircles.org/comque_20.html) challenged world leaders to heed and address this potentially catastrophic issue. We warned world leaders that time was a major factor under the Law of Compound.

Here we are ten years later just now beginning to comprehend the dire consequences of our resistance to the realities of nature's laws. Why is that?

A part of the answer is the deliberate obfuscation of the consequences and contributions of fossil fuel emissions by the coal, oil and energy industries on greenhouse gases and its impact on the earth's atmosphere. Their insistence upon "business as usual" supported by the Bush-Cheney Administration has lost ten important years critical to life as we know it. Economy vs. environment was the battle ground and economic interests prevailed (for the moment). The reality? You cannot negotiate with a beetle. There's no place for dialogue; nature's laws are non-negotiable. Our Elders say, "Obey these laws or suffer the consequences".

Lester A. Brown of the Earth Policy Institute (www.earthpolicy.org) in his weekly Eco-Economy Book Byte, May 7, 2009 puts it this way:

> **Needed: a Copernican Shift**
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> In 1543, Polish astronomer Nicolaus Copernicus published "On the Revolutions of the Celestial Spheres," in which he challenged the view that the sun revolved around the earth, arguing instead that the earth revolved around the sun. With his new model of the solar system, he began a wide-ranging debate among scientists, theologians, and others. His alternative to the earlier Ptolemaic model, which had the earth at the center of the universe, led to a revolution in thinking, to a new worldview.
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> Today we need a similar shift in our worldview, in how we think about the relationship between the earth and economy. The issue now is not which celestial sphere revolves around the other but whether the environment is a part of the economy or the economy is a part of the environment. Economists see the environment as a subset of the economy. Ecologists, on the other hand, see the economy as a subset of the environment.

Like Ptolemy's view of the solar system, the economists' view is confusing efforts to understand our modern world. It has created an economy that is out of sync with the ecosystem on which it depends.

Economic theory and economic indicators do not explain how the economy is disrupting and destroying the earth's natural systems. Economic theory does not explain why the Arctic sea ice is melting. It does not explain why grasslands are turning to desert in Northwestern China, why coral reefs are dying in the South Pacific, or why the Newfoundland cod fishery collapsed. Nor does it explain why we are in the early stages of the greatest extinction of plants and animals since the dinosaurs disappeared 65 million years ago. Yet economics is essential to measuring the cost to society of these excesses.

Evidence that the economy is in conflict with the earth's natural systems can be seen in the daily news reports of collapsing fisheries, shrinking forests, eroding soils, deteriorating rangelands, expanding deserts, rising atmospheric carbon dioxide levels, falling water tables, rising temperatures, more destructive storms, melting glaciers, rising sea level, dying coral reefs and disappearing species. These trends, which mark an increasingly stressed relationship between the economy and the earth's ecosystem, are taking a growing economic toll. At some point, this could overwhelm the worldwide forces of progress, leading to economic decline.

These increasingly visible trends indicate that if the operation of the subsystem, the economy, is not compatible with the behavior of the larger system - the earth's ecosystem - both will eventually suffer. Recent events in the economic and financial systems cause one to wonder if we're beginning to see the effects of an economy outgrowing it's natural base. The larger the economy becomes relative to the ecosystem, and the more it presses against the earth's natural limits, the more destructive this incompatibility will be. The challenge for our generation is to reverse these trends before environmental deterioration leads to long-term economic decline, as it did for so many earlier civilizations.

Other non-indigenous experts have addressed the issue, notably Timothy Weiskel, a Rhoades Scholar, and a Henry Luce Fellow at Harvard Divinity School, who wrote:

"At the heart of our current ecological crisis is a deeper more fundamental theological problem of divine control and human arrogance. In effect we are up against the limits of human understanding, yet we fail to acknowledge this. In fact, we can't even muster the humility required to recognize that in system-wide terms, we are the problem, our inability to respond to or even to recognize the dimension of the problem has tended to exacerbate the multiple manifestations of our environmental crisis. We seek feverishly to meddle with ecological processes and channel the entropic flow of energy to our intentions as if the entire handiwork of Creation were put in place simply for our needs." (Paper for the International Coordinating Committee on Religion and the Earth, 21 March 1991)

Weiskel goes on to argue that:

> "anthropocentricism of Judeo-Christian tradition allows for the exemption by covenant and confession and the concept of limitless expansions although there are no frontiers in our ecosystem, moreover no one element can grow indefinitely... including human beings."

James Hansen, noted science expert on climate change and global warming, minced no words when he said, "Ten thousand years of good weather is over." It is suggested that you visit his website - http://www.columbia.edu/~jeh1/mailings - where you will find his letter to Dr. Martin Parkinson, Secretary of the Australian Department of Climate Change (May 5, 2009: Temple of Doom), among many other important articles.

Dr. Hansen says in his e-mail of Tuesday, May 05, 2009:

> "...my frustration arises from the huge gap between words of governments, worldwide, and their actions or planned actions. It is easy to speak of a planet in peril. It is quite another to level with the public about what is needed, even if the actions are in everybody's long-term interest."
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> "Instead governments are retreating to feckless 'cap-and-trade', a minor tweak to business as usual..." "Cap-and-trade is the temple of doom."

Among other observations, Dr. Hansen, in consultation with over 20 other science experts from around the world, gathered at the 2008 Tällberg Forum (an annual global meeting of the independent Sweden-based think tank Tällberg Foundation), and established a maximum standard for CO^2 parts per million in our atmosphere at 350 ppm. Currently we are at 387 ppm which means we must reduce our carbon output. ZERO carbon is the target.

So how reliable are the predictions of established science criterion? Not very:

M.I.T. Joint Program on the Science and Policy of Global Change: Probabilistic Forecast for 21st Century Climate Based on Uncertainties in Emissions (without Policy) and Climate Parameters

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> The MIT Integrated Global System Model is used to make probabilistic projections of climate change from 1861 to 2100. Since the model's first projections were published in 2003 substantial improvements have been made to the model and improved estimates of the probability distributions of uncertain input parameters have become available. The new projections are considerably warmer than the 2003 projections, e.g., the median surface warming in 2091 to 2100 is 5.1° C compared to 2.4 ° C in the earlier study...

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John Guerrerio, Energy Examiner for Examiner.com, makes these comments, May 20, 2009:

> "The question of whether or not governments of the world will exact policies to reduce carbon emissions is indicative of the gamble we are all taking collectively. If the science behind the warnings of environmental catastrophe looming on the horizon continues to be ignored by the governments of the world, a new study from MIT published in the *American Meteorological Society Journal of Science* indicates that 'warming will likely be about twice as severe as previously estimated by the MIT model six years ago.' It seems as though the more we learn about climate change and the more components we put into the computer models, the worse the effects of climate change appear."

John Guerrerio is one of 641 National Examiners, and 296 Business and Financial Examiners for Examiner.com. Subscribe to his e-mail and learn more about energy policies and emissions.

David Chandler, M.I.T. News Office, May 19, 2009, reports:

> "The most comprehensive modeling yet carried out on the likelihood of how much hotter the earth's climate will get in this century shows that without rapid and massive action, the problem will be about twice as severe as previously estimated six years ago - and could be even worse than that."

In the same report, R. Drinn, one of the authors of the reports says:

> "There's no way the world can or should take these risks." "...and the odds indicated by this model may actually underestimate the problem, because the model does not fully incorporate other positive feedbacks that can occur, for example, if increased temperatures caused a large scale melting of permafrost in Arctic regions and subsequent release of large quantities of Methane, a very potent green house gas, including that feed back is just going to make it worse".

Let us listen to another voice of science. When Albert Einstein, the author of the Theory of Relativity, was asked what he thought was the most powerful law of the universe, he replied, "the Law of Compound". Compound is an exponential event that starts small and grows in all directions gathering mass, force and speed. As it grows, it is a dynamic force that accelerates as it grows. We see two compounds growing and accelerating. The first compound is human population. For example, by 1950, human population had grown to 2.5 billion people and it took hundreds of thousands of years to reach that number. It is now 2010, 60 years later, and human populations are at 6.7 billion people. That's a compound that continues to explode and accelerate as we speak, and is not sustainable in the economic context of the industrial world.

The second compound we are experiencing is the ice melting. The faster it melts, the faster it melts. It is not only melting in the north, it is melting in the south and in all mountain ranges across the earth. Ice and snow are fresh water sources. The human species and organic life forms around the world is mostly water. For us it is the First Law of Life. Three quarters of the earth is covered with water, and yet, less than two percent is potable for human consumption. Water is an international issue now.

The hottest parts of the earth are concentrated at the polar caps, more in the arctic than in Antarctic. Indigenous peoples populate the arctic and they are suffering change that is drastic and catastrophic. They are enduring an end to the ice culture that is 10,000 years old. Jim Hansen's words echo the reality, "ten thousand years of good weather is over". Life in the north is destabilizing, dogs won't go on the ice. The hunter's life is an everyday gamble. The so-called perma-frost is melting. Houses and trees are tipping - the bark beetle is eating the trees and killing them, providing fuel for hungry fires. The lime tick is moving north and the malaria mosquito has reached Long Island, New York. The indigenous peoples of the Marshall Islands are evacuating because of the rising seas.

Our prophecies foretold these times, and now science confirms it. Do we have options? If so, what are they? At this time we have more questions than answers. We need good leaders whose passion and interests are for the people and life on earth, for generations to come. We need strong people of good will. We need people to prepare.

OPTIONS

Now that we have identified the issues of global warming and human behavior - the underlying cause - what do we do?

Part of the answer lies in the title, "Global Warming". We now understand that the problem is global, beyond local, regional, and national borders of regions and states.

Who is out there recognizing and working on this problem globally? The answer is more than you think. Not everyone is asleep or have been bought off by the corporate interests. Prominent among those is Al Gore, former Vice President of the United States. His movie, *An Inconvenient Truth*, alerted the minds of millions of people across the globe. His book is instructive and offers ways to approach the problem.

So is there hope? Of course there is, but it requires action - hands on and dedication to the issues we face. This requires a collective action requiring global mobilization by nation states and countries. Who else is out there are the peoples' science experts and universities who collaborated on the M.I.T. report.

There are Native peoples, indigenous nations, traditional spiritual leaders who instruct on our relationships with nature who are visionary thinkers with values and responsibilities to our future generations. Ethical values of equality, respect, and thanksgiving. To be united in mind, body and spirit.

These past four years, I have been attending the Tällberg Forum, where the meetings have centered on global warming and related issues. Leaders from around the world attend, including the King of Sweden.

This past year the Tällberg Foundation published *A Provocation Grasping the Climate Crisis* - an urgent message to all those who are actively involved in the negotiations of the post-2012 climate agreement. The main purpose of the provocation is to challenge the widespread perception that nations are dealing effectively with climate change when, in fact, almost nothing

is happening yet on the global scale. *The Provocation* urges people to fully recognize the scale of the task ahead - to overcome the inertia of "climate politics as usual" and "to evolve a genuine approach to governing the global commons for the good of all." Downloaded the Provocation from their website:
http://www.tallbergfoundation.org/T%C3%84LLBERGINITIATIVES/Publications/Graspingtheclimatecrisis/tabid/555/Default.aspx

Pushing our wealth creating systems beyond their ability to sustain and correct themselves is disastrous as we can see from today's financial crisis. Pushing the natural system beyond its finely tuned and balanced equilibrium is even more dangerous. It is reckless. Nature does not provide bailouts... it will be almost impossible to reverse a planetary environmental crisis - at least in a time scale relevant to humankind... We have entered the danger zone of "Tipping Points" where our impact threatens to irreversibly change the services provided by ecosystems.

The Provocation provides the following considerations to underpin the negotiations and implementation of the post-2012 climate agreement.

First - Climate change must be addressed within the wider challenge of preserving the capacity of global ecosystems to continue to function as sinks for green house gases and avoid ecosystem feedback that accelerates global warming.

Second - Green house gas emission reduction targets and other policy measures reflect the most current, authoritative and independent science, e.g. (the May 2009 M.I.T. Report). Action for mitigating climate change must be based on a risk management approach that steers away from the risk of planetary tipping points.

Third - Ethics and equity must be at the core of the global response to climate change. Without a focus on global equity, the response will be only partial and inadequate.

Fourth - The ultimate effectiveness of the post-2012 climate agreement depends on global governance reform that promotes the common good over national interests and addresses the policy and market failures that produce environmental degradation such as climate change. Success also depends on addressing the enforcement deficit that undermines global environmental governance approaches in the past.

Important policy solutions will remain abstractions as long as nations do not come together to agree on a plan that reflects the magnitude of the problem and which is supported by the most rigorous of compliance measures. Nation states must agree on enforcement laws with penalties. Will states comply? Only if their public forces them to do so. That means mobilization by the general public to apply political, economic, civil and moral pressures on governing bodies.

In America, we have had several examples of people power. Two examples were provided by youth. First, the mobilization of young people in schools and universities to bring in their votes and fund raising for President Obama.

The second was the mobilization of youth who created Powershift 9 under the leadership of the Indigenous Environmental Network (IEN), who then went to Washington D.C. to challenge their status quo.

A third people movement was the American Indian Coalition to support and elect President Obama.

Our mission then is to bring the politicians in Washington D.C. and wherever you live into the fight against global warming as the primary issue facing humanity today. It is our lives and our future that is at stake.

Business as usual is over.

"ZERO CARBON," "350 PPM," "COOPERATION NOT COMPETITION," "HALF MEASURES ARE NO MEASURES," "OIL IS OVER - WIND, SOLAR, GEO-THERMAL – WAVES FOR THE FUTURE," "WATER FOR LIFE NOT FOR COAL," AND "RESPECT FOR MOTHER EARTH - PEACE FOR ALL OUR RELATIONS.