

How We Might Increase the Odds of Human Life Surviving Beyond 2050. Rapidly Melting Permafrost Threatens a Little Heralded Potential Cataclysm.

By Mark Goldes, Chairman & CEO, Magnetic Power Inc.

All of us, you and I, our children, and grandchildren, are facing the biggest challenge that has ever confronted humanity: the possible extinction of most, if not all, human life on earth by 2050, due to the melting of the Arctic permafrost. This is an unrecognized global emergency. Crucial global warming "tipping points", highlighted by the world scientific community, have already been passed, with possibly irreversible consequences.

No matter what we do, some of Global Warming's worst predicted effects cannot likely be avoided. We can anticipate more destructive hurricanes. The eventual flooding of major cities such as New York, Miami and London is threatened. Large areas of Florida, and numerous low-lying countries, are facing permanent inundation due to increasing sea levels and melting glaciers and ice caps. Shortfalls and rising prices for oil and gas are a parallel, much more evident, problem. Terrorism and the war in Iraq preoccupy the media. But all these events pale before the looming catastrophe. If we do not quickly implement actions suited to the threat posed by runaway methane release from the melting Arctic permafrost, we may be headed toward the extinction of life on Earth.

More than a year ago, Geologist John Atcheson described what he called a "Ticking Time Bomb," the most immediate threat to life on our planet. (See also his recent article: Hotter, Faster, Worsen). Huge quantities of methane, a greenhouse gas over 20 times more potent than carbon dioxide, are buried in the Arctic tundra. This permafrost contains 3,000 times more methane than does the atmosphere. Twice before in the history of our planet, 251 million and 55 million years ago, runaway methane almost eliminated life on earth. In Atcheson's opinion, based on such prior events, a rise in global temperatures of a mere 11 degrees Fahrenheit, (6 degrees C), would likely catalyze this unstoppable catastrophe,

causing these gases to "burp" into the sky. The ensuing rise in temperatures would release yet more methane, heating the Earth and seas further, and so on. There are 400 gigatons of methane locked in the frozen arctic tundra- enough to start a cataclysmic chain reaction and release of these greenhouse gases.

The first results from the most comprehensive study of greenhouse warming ever attempted (a massive effort designed by Oxford University scientists) indicates that average temperatures could easily rise beyond 6 degrees C in a few decades, unless extremely deep cuts in greenhouse gas emissions are made very rapidly. The study's chief scientist, David Stainforth, said: "Our experiment shows that increased levels of greenhouse gases could have a much greater impact on climate than previously thought." Another participating scientist said: "Even today's levels of greenhouse gases could already be dangerously high." Team member Myles Allen, an Oxford physicist, says, "The danger zone is not something in the future. We're in it now."

Carbon is the problem. We must rapidly replace technology that produces Carbon Dioxide with systems that do not. Positive alternatives include wind, solar, and a handful of other existing renewable systems, as well as a handful of revolutionary new, thus far severely underfinanced, technologies. Uranium fueled nuclear plants have numerous problems including long time delays, and are, therefore, not as desirable as alternative technologies.

Fuel burning vehicles and power plants are the biggest challenge. Almost every variety of fuel, when burned, contributes dangerous warmth to our atmosphere.

Ironically, had more scientists been open to examining the remarkable evidence available to them, the world might never have needed oil. Back in 1874, a Pennsylvania inventor named [Wesley Gary](#), ignored scientific dogma and created the first of his fuel-free magnetic motors. Textbook science then, as now, denied such engines are possible. But Harvard and MIT professors visited Gary and confirmed that he had done precisely what he claimed. Two U.S. Patents were issued, and one in Canada. In 1879, Harper's Magazine carried an article about his work, ending with the comment that it might one day power locomotives. The four wheeled automobile was invented six years later.

Then, in 1925, a German inventor named Hans Coler, demonstrated a small,

magnetic generator without moving parts. In 1927, Nobel Laureate Werner Heisenberg stated: "I believe it is possible to utilize magnetism as an energy source." A decade later, Coler produced 6,000 watts of electricity from a magnetic generator, and Hitler's admiralty supported his efforts. At the time, there was no comprehension as to the source of the energy. Coler wrote: "These fundamental researches have made the first real and large breach in the citadel of present scientific belief." His laboratory was destroyed by an Allied bomb near the end of WWII. Coler survived, and cooperated with British Intelligence, which published a Classified Report in 1946 about this astonishing achievement. The Report was [declassified](#) in 1979. It is available on the Internet.

Laboratory progress in such systems is currently confirming these claims, and new, fuel-free, magnetic systems are emerging. They appear capable of providing the necessary power. Given sufficient support, there is reason to believe they can be manufactured in a multitude of variations, in huge quantities, rapidly enough to avoid the runaway disaster.

A crash program needs to be implemented to speed this urgently needed breakthrough technology to market. Some systems already promise to replace car engines, and may scale to a megawatt, or more. Capable manufacturers must be enlisted in this effort everywhere on the planet. The massive production of arms achieved during World War II demonstrated that industry can respond to emergencies in ways hardly imagined prior to a crisis. The necessary worldwide manufacturing capability exists. It must be utilized rapidly, and to the fullest extent practical.

Every hour of every day counts. The time for urgent action is now. Survival demands that we open our minds to unprecedented possibilities and act, intelligently, but without delay.

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