

## Title:

Making Money on the Global Warming Crisis

## Word Count:

1946

## Summary:

Looks like global warming and climate change could kill most of us. Some financiers see a way we can make some money on the crisis. Which is the best leveraged sector to capitalize upon the growing demand for less fossil fuel?

## Keywords:

drought, famine, global warming, energy, nuclear, uranium, climate change, gold, Arctic Circle

## Article Body:

Bad weather may be heading our way. Many very smart voices have raised their volume over the number of alarming red flags pointing to a worldwide environmental catastrophe coming in a few years or decades hence. One voice, coming from the sharp mind of James Lovelock is resounding across the world's media nearly every day. His solution: get more nuclear reactors online and sequester the carbon dioxide emissions as fast as possible.

What's the alternative? Move to the Arctic Circle, where you may someday bask year around with temperatures pleasantly at 74 degrees Fahrenheit. According to findings recently published in the journal Nature. About 55 million years ago, there was something called the Paleocene Eocene Thermal Maximum (PETM). In this PETM phenomenon, the entire Earth was heated up by a gigantic release of greenhouse gases, like carbon dioxide. Lovelock has insisted we may see that kind of hot later this century.

Now, another brainy man, with whom we have many chats this year, has issued a special 56-page report, entitled "Investment Implications of an Abrupt Climate Change." Co-authored by Market Strategist Kevin Bambrough and Eric Sprott, Chief Executive and Portfolio Manager of the world-famous money management firm which bears his name, they present a compelling argument as to why and how global warming and climate change is going to dramatically impact our financial world. You are well advised to read it.

Take Your Pick: Nuclear Energy or Cheap Arctic Land

Aside from optioning to buy vast tracts of land near the Arctic Circle, as Dr.

Lovelock's conclusions force us to briefly consider, what can we do to protect our finances? Global warming, climate change and an apocalypse soon to dawn on the horizon are probably too much reality for the here and now. But, what will you do ten to thirty years from now? This past week, we interviewed Julian Steyn, author of *A Brighter Tomorrow*, which he co-wrote with U.S. Senator Pete Domenici. A conservative and rational man, even he admitted in an email, "I am afraid I do agree with his (Lovelock's) concerns."

If one finds logic within the statistical analysis presented by the United Nations Intergovernmental Panel on Climate Change (IPCC), a rational mind would want to start protecting his finances today in order to ensure future survival for his family and lineage. Esteemed scientists have picked their way through mountains of statistics, charts and projections about what is happening with melting glaciers, rising temperatures, higher sea levels and so forth. They do not like what they see, they are not alone, and the better minds are not endorsing wind farms or solar panels as "the solution." They see nuclear fission reactors as mandatory, and the faster these go online, the less we will later have to sweat (literally).

Eric Sprott and Kevin Bambrugh have laid out a possible solution, a cogent thesis as to why we must stop fooling around now. They didn't write the report to alarm and cajole you to lynch the next environmentalist or anti-nuke whom you come across. Messrs. Sprott and Bambrugh provided a blueprint of what must be done by governments and decision-makers. More importantly, they have given us extremely provocative advice on HOW to protect our finances during the brewing crisis.

Remember, it won't just be some meteor hitting the earth (although that might happen, too). Global warming is tantamount to boiling water on your stove. First, it gets warm, then warmer and warmer. Eventually, it gets hot. Then, the water boils. In other words, the catastrophe will brew for a while, causing political and economic instability, and a host of other ills, probably better described in biblical terms. Most of us, unfortunately, will wait until the next Hurricane Katrina is a few miles down the road before waking up.

Through the first half of the report, the authors cover global warming and climate change, in just about every way imaginable. Messrs. Sprott and Bambrugh found nooks and crannies which may alarm you. Did you know the world's largest aquifer, the Ogallala aquifer in the United States, is drying up because the glaciers, which created this aquifer, are receding? Fresh water is already in short supply for one-third of the world's population. We may be surrounded by water, but could lack a glass of fresh water to drink. Ask the Saudis why they are building desalination plants as fast they can. Imagine if those arid

conditions prevailed across more than 90 percent of the landmass of earth.

What happens as the earth's temperature goes up? Increased urbanization, growing GDPs and demand for all the niceties that come with "civilization" have a price: more CO2 emissions. Deadly CO2 emissions, which raise the earth's temperature, poison our air and kill our plants (and us), are very likely going to turn this earth into a potboiler before the century ends.

### Nuclear Expansion Needs More Uranium

"This IS the perfect storm," Kevin Bambrough warned, not as the abused cliché the term has become, but as an angry voice demanding decision-makers take to heart the gravity of CO2 emissions. "We need more nuclear reactors now," he told us. He directed us to environmentalist Patrick Moore's contention that the U.S. should reverse its energy source mix from an 80-percent dependence upon fossil fuels, relying instead upon nuclear energy for 60-percent of our electrical power supply.

Under the former Greenpeace co-founder's scenario, Bambrough extrapolated the World Nuclear Association (WNA) projections for 2030. Nuclear power demand is then expected to soar from the current 368 Gw, produced by the world's 441 nuclear reactors. He computed, using Moore's premise of a 60-percent nuclear-reliance, that nuclear reactors would produce 18,900 Twh of the total power demand in 2030, which the WNA estimates might reach 31,500 Twh. To produce that much electricity, Bambrough calculated that by 2030, nearly 2700 nuclear reactors will be required across the planet. Envisioning the "potential" of a 600-percent increase in nuclear reactors online, about 25 years from now, Bambrough also calculated how much uranium would be required to fuel those reactors.

According to Bambrough, current global uranium mining production rests at about the 100 million-pound level. By 2030, if nuclear energy expands as Moore insists it should, then the world's utilities will require on the order of about 1.3 billion pounds every year. With regards to a planetary build-up of nuclear energy, Bambrough wrote, "The supply of uranium may well be the most limiting factor."

This may become the new case for a sustained rally in the spot uranium price. Bambrough wrote, "Much higher uranium prices will be required to attract enough investment capital to meet the growth in demand." This has already begun, as uranium prices have skyrocketed for the past six years. Long-term uranium recently traded as high as \$46/pound, exponentially higher than the spot price of \$6.40/pound in late 2000. Bambrough is correct in his conclusion. Building an

underground uranium mine costs far more than it did in the glory days of uranium in the 1950s. Environmental regulations force miners to spend more and take longer in constructing any uranium-producing facility, including an ISL operation.

"Marginal mines will become price setters," wrote Bambrough. This helps explain why the Sprott Asset Management funds have invested heavily in companies such as Strathmore Minerals (TSX: STM; Other OTC: STHJF), Energy Metals (TSX: EMC) and others. When we first interviewed Strathmore Minerals Chief Executive, Dev Randhawa, in June 2004, he told us his strategy was to capitalize upon a sustained rally in the uranium price by acquiring properties which were uneconomic at the sub-\$20/level. His strategy has rewarded shareholders and continued to do so with each uptick in the spot uranium price. If Bambrough's conclusion is accurate, the junior uranium developers could very well become the Internet high-fliers. That conclusion was reached by newsletter writer James Dines, this past November, and repeated numerous times in multiple reports by others.

"Large low-cost producers may be able to reap Middle East-like oil profits for decades," wrote Bambrough. If the spread between production costs and spot uranium keeps widening, the smaller uranium companies are going to hit it big. Those companies, which postponed uranium mining, will be selling their uranium production at the kind of profits-to-production spread ExxonMobil or ChevronTexaco now enjoy.

Rising uranium prices are probably more of an irritation for fuel traders than the utilities, who worry about construction costs. The actual fuel cost to operate a nuclear power plant borders on the absurd. Bambrough wrote in his report, "Fuel costs (for nuclear) are merely 4.5 percent of total costs, even with uranium at \$40 per lb. If uranium rises to \$100 per lb (a further 150 percent increase), the cost of nuclear power would only rise by approximately 6.75 percent." Fuel costs for coal and gas are 35 and 73 percent, respectively. And they release massive doses of CO<sub>2</sub> into the air.

What else can be done aside from a worldwide, unanimous endorsement of nuclear energy? There may still be difficulties ahead. Lovelock told us the CO<sub>2</sub> emissions problem should have been addressed 50 years ago. It takes between 50 and 100 years for the atmosphere to cycle through those emissions.

The Sprott report co-authors concluded there will be supply problems for food, water and energy. They envision problems with national security, soaring grain prices, and greater investments needed to provide water and energy to those who aren't buried ten feet deep in their indebtedness. They foresee a currency

collapse as central banks flood the money system to provide liquidity. And, of course, gold will resume the role it has always held during times of overpowering economic calamity.

Is this too much reality for you? Should we just wait a while and see what transpires? We might not be so lucky. Some experts, such as the Chief Claims Strategist for Swiss Re, wrote in a March 2006 CERES report, "Global warming has accelerated from a problem that might affect our grandchildren, to one that could significantly disturb the social and economic conditions of our lifetime."

In other words, Messrs. Sprott and Bambrough are correct in their assumptions and conclusions. The time to get moving is today, not thirty years from now.

For a second opinion, before completing this column, we forwarded the Sprott report to David Miller. He wears many hats, including a consultancy to the International Atomic Energy Agency, third-term Wyoming legislator, president of Strathmore Minerals (TSX: STM) and a walking encyclopedia on uranium, geology, nuclear power and politics. He responded quite bluntly, "The fuel of the 19th century was coal. The fuel of the 20th century was oil. Both have run their economic course. Uranium is on its way to becoming the energy fuel of the 21st century. The crescendo of countries clamoring for nuclear energy has been growing louder in each year of this new millennium." Perhaps, we may yet see Moore's energy mix come to pass, or at least dramatic growth in the nuclear sector to more closely approach his targeted percentage level.

One key question remains unanswered, during our two-year investigation into uranium and nuclear energy. Sure, we've gotten a lot of answers, but we remain unconvinced. No one has satisfactorily answered this question: "Will there be sufficient supplies of 'already mined uranium' and current mining production available to the world's nuclear reactors to meet the anticipated global demand for electricity?" The make-break word in the above question is "available." Uranium is nearly everywhere. There are about 1.7 billion pounds of 'already mined uranium' in the world's inventories. But will there be enough uranium made available to the utilities when the time comes?

If there is not, today's spot uranium price could look comparable to gasoline prices, circa 1965, at some future point.