

**Title:**

Earth's Population to Drop by 80 Percent, Says Top U.K. Scientist

**Word Count:**

2234

**Summary:**

An exclusive interview with James Lovelock about his latest book, our doomed civilization, how today's environmental movement is wrecking the environment and nuclear energy remains one of our few hopes for the survival of our society and quality of life.

**Keywords:**

Environment, Global Warming, Climate Change, Nuclear Energy, Uranium, Coal, Renewables, wind, solar

**Article Body:**

Some like it hot. According to environmentalist James Lovelock, we'll get plenty of hot between now and the end of the century. "We are so far down the path toward the hottest we have been, since we were 55 million years ago," Dr. Lovelock, who is also a leading atmospheric scientist, told StockInterview in a tape-recorded interview last week, "that as many of us look at it, it's not going to make very much difference what anybody does." In stronger commentary, which he wrote for England's Independent newspaper, this past January, Lovelock warned, "The Earth is about to catch a morbid fever that may last as long as 100,000 years." And we were worrying about another Ice Age?

Skeptics might wonder if his 1200-word essay was just book publicity hype. Lovelock's scathing our-world-is-doomed article was published about two weeks before Penguin Books (UK) began selling his latest work, *The Revenge of Gaia*, in bookstores across the British Isles. He did admit within his newspaper commentary, "This article is the most difficult I have written." While interviewing Dr. Lovelock, during our transatlantic phone conversation, the octogenarian sounded sad with his prediction, but still optimistic, despite his ruthless appraisal of what may lay ahead for the rest of this century. "I see the crunch coming as an opportunity to improve ourselves in a way. Who knows? Man may have a better chance when he starts again."

ONLY ABOUT ONE BILLION HUMANS WILL SURVIVE

What does he mean by starting again? "By the end of this century, there is a

high probability that the bulk of our species on the planet will be eliminated," the soft-spoken Lovelock gravely remarked. "There may be something, plus or minus, on the order of a billion left." Is there much hope, we asked. "I don't see our current civilization hacking it," he lamented in his response. But, but, what if? "Enormous changes must be made," he stressed. "Society is much too slow in cutting back." He insisted these changes should have started at least 50 years ago. Later he added, as an afterthought, "If Europe and USA were trying to be good and cut back by 30 percent, it's really not going to help much. I don't think the public wants to do it."

In Lovelock's forecast, he envisions, at the end of this century, the last few humans would be forced to rebuild the remnants of our civilization in the Arctic. It won't be as cold up there by then, as you might think. He told us, "Within 25 years, most of the global ice in the Arctic will be gone. You will be able to take a sailboat to the North Pole." How long before we begin to feel these changes? "In my own modeling, I rather think it is an unknown number of years," Lovelock explained. "It may be five years or it may be 30 years." He offered a visual, "Think of it as a rope or a string. Global warming may run up in a straight line or a curve lying a bit loose as the IPCC seems to project."

Lovelock summarized why his forecast is dire and probably irreversible, "Everybody forgets the greatest damage we've done to the earth is not so much the emissions from greenhouse gases, but taking away the natural resistance from the farmland ecosystem. By doing that, we have disabled the planet's ability to regulate itself." Lovelock does not enjoy painting a picture of what earth might look like several decades from now. He wrote in the Independent, in January, "Much of the tropical land mass will become scrub and desert, and will no longer serve for regulation; this adds to the 40 per cent of the Earth's surface we have depleted to feed ourselves." Through his book and in various articles, Lovelock has repeatedly blasted environmentalists who gamble away earth's future by campaigning for renewable energy sources.

That's when we began talking about environmentalists, especially the idealists who claim to be helping preserve the earth. So, we asked this leading environmental scientist what was really wrong with today's environmental movement. Bitterness entered his voice when Lovelock answered, "It's mostly made up of urban people, who know almost nothing about the countryside and still less about the ecosystem." He scoffed, "Their solutions are basically urban-political solutions. They continue to insist on wanting to run their cars on bio fuels. This is one of the maddest ideas of the lot." Lovelock cuts no slack for those championing the cause of bio fuels. He writes in The Revenge of Gaia, "It would require us to burn every year about two to three gigatons of carbon as bio fuel (a gigatons is one thousand million tons). Compare this quantity with our yearly

food consumption of half a gigaton tons... We would need the land area of several Earths just to grow fuel."

Does he believe environmentalists are wrecking the environment? "I'm afraid I do," he glumly responded. Because we know there remain several environmental groups who refuse to embrace nuclear energy as a much-needed solution to the planet's energy mix, we asked what he would like to say about them. "They are being very foolish," he quickly shot back. After a pause, he added, "They are living in a dream world." Like the father figure he is, Lovelock is disappointed but tries to remain buoyant. He wrote in his recent book, "My feelings about modern environmentalism are more parallel with those that might pass through the mind of a head-mistress of an inner-city school or the colonel of a newly formed regiment of licentious, and naturally disobedient young men: how the hell can these unruly charges be disciplined and made effective?"

#### LOVELOCK WANTS THE WORLD TO GO NUCLEAR NOW

The headline of a recent editorial in a Boston newspaper asked, "Are Pro Nuclear People the New Greens?" We discussed that. "It's a bit of an old term, really," he grinned. "Nuclear has been around for more than 40 years at least. I suppose in some countries, like the United Kingdom, you will find some groups are looking more toward nuclear."

Make no mistake in thinking James Lovelock is anything but Pro Nuclear. His quote adorns the top of the front page of the World Nuclear Association's website, "There is no sensible alternative to nuclear power if we are to sustain civilization." Rightly so, the trade association refers to their proponent as the "preeminent world leader in the development of environmental consciousness." In his book, Lovelock writes, "There is no alternative but nuclear fission until fusion energy and sensible forms of renewable energy arrive as a truly long-term provider. Nuclear energy is free of emissions and independent of imports from what will be a disturbed world."

Lovelock briefly analyzes the value and harm of each energy source in *The Revenge of Gaia*. He has a burning disgust for coal mining, and finds carbon-based fuels inefficient and dangerous, not only to humans but also to earth as a self-regulating system. He has frequently warned that renewables are insufficient to meet our planetary energy needs. In contrast to renewable advocates Amory Lovins or Senator Hillary Clinton, Lovelock sees little value in the immediate future for either solar or wind energy programs, and has harsh words for them, writing, "It will fail and bring discredit both to the greens and to the politicians foolish enough to adopt renewables as a major source of

energy before they have been properly developed." He believes their renewable energy solutions might only hasten our civilization's demise.

Because Lovelock strongly opposes widespread mining, and because nuclear power depends upon the mining of uranium, how does he feel about uranium mining? "I don't think it matters because it will never be a very big operation," he replied. "When you consider the ratio of the energy produced from uranium compared to coal, on a ratio of millions to one, the quantity of uranium being mined is trivial compared to coal mining." We explained to Dr. Lovelock how U.S. uranium companies replaced conventional mining with In Situ uranium recovery. Lovelock thought the In Situ is "a good idea because it mobilizes the uranium with the oxygen in the water and doesn't make a god-awful mess of the environment."

#### CALLS NAVAJO NATION URANIUM BAN ABSURD

Because of our coverage regarding environmental developments in New Mexico for companies such as Uranium Resources (OTC BB: URRE) and Strathmore Minerals (TSX: STM; Other OTC: STHJF), we talked about uranium mining in that state. Given that it was such an odd event, we discussed the Navajo Nation ban on uranium mining in the four-state tribal reservation area, called 'Four Corners.' Puzzled ourselves by this, based upon the latest scientific developments of the in situ uranium recovery method, we discussed an earlier conversation we had with Dr. Fred Begay.

This past November, while visiting Los Alamos National Laboratories (LANL), we had asked Dr. Fred Begay about the new face of uranium mining. Dr. Begay, who is both a nuclear physicist and a Navajo, was continuing his affiliation with LANL by conducting community out-reach programs on the Navajo reservation. He told StockInterview, "The Navajo don't get it. They have illiteracy on mining and uranium."

We asked James Lovelock what he thought of the Navajo uranium ban in the context that the tribe also receives about \$100 million annually from coal mining royalties. "Had there been no mining at all in the Navajo Nation, and they wanted to keep the deposits pristine as part of a natural ecosystem, I could understand their rejection to any mining," he explained. "But if they allow coal mining, then it's absurd to reject uranium mining."

What would James Lovelock say to Navajo Nation president Joe Shirley, Jr. or to any of the aborigine tribes in Australia and elsewhere, which dislike uranium mining? "Very little," he abruptly replied. Then, he clarified his response. "It's almost like trying to persuade any religious person that their belief is

unfounded. I wouldn't dream to explain to a devout Catholic that I'm doubtful about the virginity of the Virgin Mary." He compared it to an article of faith, adding, "They don't think about it. They don't know that it is wrong. It is very difficult to deal with people like that." Does that apply to the average anti-nuclear environmentalist? He explained how he does deal with the uninformed, "The only thing I found effective in this country, the United Kingdom, is to say, 'Yes, it may be slightly dangerous, but nothing quite so dangerous as global warming. So, we may have to use it to overcome this.'"

#### CHINA AND FINAL WORDS

One can not talk about 21st century nuclear energy without bringing up China's dilemma. The world's largest coal miner and one of the worst air polluters, China is planning the most aggressive nuclear energy expansion program of the past thirty years. "The Chinese government is the strongest government in the world," Lovelock began. "I have a friend that goes over there regularly to advise the Prime Minister on their environmental problems." Thus began a classic Lovelock anecdote:

"They say to him, 'We're all doing our best to have more renewable energy than anybody else. We are building nuclear power stations, as fast as we possibly can, so as to not add more carbon to the atmosphere. However if we can't develop the resources for our people, strong as our government is, there will be a revolution tomorrow. We are in no position to stop using the coal resource until we build enough nuclear or other renewable sources to meet our needs.'"

He concluded, "If the Chinese can't do it, how the heck can the Western democracies do it?" Therein lies what some consider his fatalism about Earth's health. Is he truly the pessimist some make him out to be?

"Quite to the contrary," he responded. "I've been accused of being a pessimist, but no, I don't think that way." Lovelock compared the current threat of global warming to his experiences as a student and young worker, during World War II. "In 1940, we were threatened by invasion by a very powerful enemy," he reminisced. "Some people threw up their arms in horror and said, 'There's nothing we can do.' But it was a very enjoyable time for those who worked hard and faced the threat." Britain and Lovelock survived the threat, passing to the next generation what he learned from this experience, "It is terrible to think of Global Warming, but it is nevertheless challenging. It can be quite a wonderful time for a lot of younger people."

Some have reported The Revenge of Gaia is Lovelock's last will and testament. We instead read Lovelock's masterpiece in a different light. Our conversation with

Dr. Lovelock led us to believe his book is his sternest warning to the world's politicians and scientists to speed up their embrace of nuclear energy in order to avert a very possible series of catastrophic events, which may come to us in the decades ahead. He did say there was "a high probability," but Lovelock never said "definitely." In this broad difference, Lovelock yet looks into his cup and finds it half full, not half empty.