



Fukushima nuclear crisis needs urgent attention

The Japanese government has belatedly admitted that the Fukushima nuclear crisis is the most dangerous it's been since three of the reactors melted down after the 2011 tsunami. After denying for months that radioactive water was leaking into the Pacific ocean, Tepco, the well-connected utility that runs the Fukushima nuclear plant, admitted last week that about 300 tons of highly radioactive water had leaked from one of the thousand makeshift tanks the company had built near the shoreline to store radioactive water. It also admitted that some water had reached the ocean and other tanks are in danger of leaking.

China announced it was "shocked" at the news of the leak. The Japanese Trade Minister stated that Tepco has been using a "whack-a-mole" strategy in dealing with contaminated water, and the government announced it will take the lead with "emergency measures." Yet nothing fundamental has changed.

Tepco's tanks store over 300,000 tons of radioactive water. Another 400 tons are added every day, some from groundwater flowing into the facility's basement and some from water used to cool the reactors and spent fuel. The radiation levels in the latest leaked water are so high that "a person standing close to it for an hour would

receive five times the annual recommended limit for nuclear workers."

Tepco has demonstrated a shockingly cavalier attitude about a series of leaks and management failures. It didn't test the ability of the tanks' rubber seals to withstand radiation. The tanks lack water gauges to monitor leaks. The company assigned only two workers to check the nearly 1,000 tanks —on two-hour patrols twice a day—without any tools to measure radiation or any duty to keep normal inspection logs.

Before the latest leak, the Japanese government had banned the export and domestic sale of most fish caught off the Fukushima coast, devastating fishermen's livelihoods. But radiation from Fukushima isn't confined to Japan. "Radionuclides have been detected in U.S seaweed, California bluefin tuna, rainwater, groundwater, topsoil, dairy and agricultural products." Stanford University researchers found radiation from Fukushima in 100% of bluefin tuna caught off the California coast. Experts are concerned that radioactive isotopes like strontium-90 are "entering the ocean at levels that will accumulate in seafood and will cause new health concerns."

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Did you know?

- Number of energy storage projects operating or under development worldwide633
Increase in U.S. sales of hybrid and electric vehicles in first 7 months of 2013, year-over-year30%
Projected increase by 2030 in global demand for water, above current reliable supply40%
Predicted annual growth rate in African mobile telecom market, 2013 to 202021%



Academy creates Elisabet Sahtouris Chair for Evolution Biology

The World Business Academy has created the [Elisabet Sahtouris Chair for Evolution Biology](#) in honor of Academy Fellow Elisabet Sahtouris, Ph.D., an evolution biologist, futurist, author, speaker and consultant on Living Systems Design, who will be the first holder of the Chair.



Dr. Sahtouris' deep understanding of nature's principles and practice, revealed in biological evolution, and her ability to use them as models for organizational change have made her a wise guide for our times, a voice of hope, and a powerful force for good in the world. She applies nature's principles and practices in the corporate world and in global politics and economics, providing vital lessons about how to create sustainable health and well being for humanity within the larger living systems of planet Earth.

Showing how our current crises are propelling us into evolutionary maturation from competition to cooperation, she travels as a speaker in North, Central and South America, Europe, Asia, Africa, Australia and New Zealand.

She did her post-doctoral work at the American Museum of Natural History in New York, taught at the University of Massachusetts and M.I.T., and was a science writer for the HORIZON/ NOVA TV series. She was invited to China by the Chinese National Science Association, organized Earth Celebrations 2000 in Athens, Greece and has been a UN consultant on indigenous peoples.

Dr. Sahtouris' books include [EarthDance: Living Systems in Evolution](#), and [Biology Revisioned](#), with Willis Harman, Ph.D., co-founder of the World Business Academy.

Investors achieve strong results on climate change, supply chains, water risks

"Investors achieved noteworthy victories during this year's shareholder proxy season, with a near record 110 shareholder resolutions filed with 94 U.S. companies on corporate sustainability challenges such as climate change, supply chain issues and water-related risks," as [Ceres recently reported](#).

[Investors withdrew over 40 resolutions after companies committed](#) to reduce carbon emissions and the adverse effects of fracking. Shareholders voted strong support for other resolutions asking oil and gas companies to set methane emissions reduction goals. First-time resolutions about fossil fuel reserve risks ("carbon bubble" resolutions) garnered up to 22% support.

Needed: more pushback against "the third carbon age"

[Michael Klare](#), an expert on global resource politics, [warns](#) that we are not in fact on a path to a clean energy future. We are entering "The Third Carbon Age: the Age of Unconventional Oil and Gas," following The Age of Oil, and before that, The Age of Coal.

Calling for greater investment in green energy and campaigning for curbs on carbon emissions will not be enough, he writes, especially in light of institutional biases that favor fossil fuels and present investment patterns.

What we need, Klare says, is "a systemic drive to identify and resist those responsible for our growing reliance" on unconventional forms of oil and gas—a drive that goes beyond the current divestment movement.

Klare's many books include [The Race for What's Left](#) (2012).



Why the U.S. power grid’s days are numbered

The U.S. electrical grid isn’t dead yet, but its business model—which hasn’t changed much since Thomas Edison invented the light bulb—is “doomed to obsolescence,” according to David Crane, the CEO of one of the largest U.S. utilities. He says that “in about the time it has taken for cell phones to supplant land lines in U.S. homes, the grid will become increasingly irrelevant as customers move toward decentralized homegrown green energy.”

A recent [excellent Bloomberg Businessweek article](#) explains how the solar and distributed generation push, combined with a revolution in microgrids, “is turning every person, company, or institution with a renewable energy power system into a self-sustaining utility.”

“Divest, Re-invest”

The mainstream media is focusing attention on the need to divest from fossil fuels and re-invest in clean energy. A [recent Forbes article, “Divesting from fossil fuels means a cleaner, safer and more resilient future,”](#) links to several resources for investors looking for a new path to minimize risk or switch to more responsible investing.

Because the fossil fuel industry holds five times more in reserves than we can safely burn to avoid the worst effects of climate change, there’s a growing recognition that fossil fuel stocks are overvalued and the financial system is vulnerable to a dangerous \$20 trillion “carbon bubble.”

As the *Forbes* article states, ““This isn’t just a viewpoint that small institutional investors are espousing. Groups as diverse as Shell, Mercer, HSBC, prominent insurance companies and re-issuers, Standard & Poor’s and the International Energy Agency have been giving clear warning signs about continuing to invest in fossil fuels.”

Unsubsidized solar revolution

An “unsubsidized solar revolution” has begun, according to the global bank UBS. Solar power still provides less than 1% of global electricity, but a few statistics show the speed of the revolution:

“Only 10 years ago, the generating capacity of the entire world’s solar photovoltaic systems totaled just 2.8 gigawatts, about the same as six average-sized coal power plants. Today there is more than



102 GW and solar PV power has been the biggest source of new electricity generation for two years in a row in Europe. The

industry predicts [global capacity will double to 200GW by 2016,](#)” according to the *Financial Times*.

Since the beginning of 2010, the average price of solar panels has fallen 70% and average system prices by 50%, the U.S. Solar Energy Industries Association (SEIA) reports. The [SEIA’s website is full of interesting facts](#) about solar (e.g., “A solar system is installed in the U.S. every four minutes”; “Solar has quadrupled in Massachusetts this year”; and “There are more solar energy workers in California than actors; there are more solar energy workers in Texas than ranchers; and nationwide, there are more solar energy workers than coal miners”).

The U.S. has room to improve. Last year, residential PV systems installed in Italy, Australia and Germany [cost nearly 40% less than in the U.S.,](#) largely because of soft costs (non-hardware prices) that can be influenced by local, state, and national policies.



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Fukushima nuclear crisis

The [American Medical Association](#) has adopted a [resolution](#) calling on the U.S. government to test all U.S. seafood for radiation. The National Academy of Sciences has said that there is no safe level of radiation.



Last March, John Rowe, the newly-retired CEO of Exelon, America’s largest nuclear power producer, said that nuclear power is no longer an economically viable source of new energy in the United States. “Let me state unequivocally that I’ve never met a nuclear plant I didn’t like,” he said. “Having said that, let me also state unequivocally that new ones don’t make any sense right now.... I’m the nuclear guy. And you won’t get better results with nuclear. It just isn’t economic, and it’s not economic within a foreseeable time frame.”

We are paying a heavy price for our [nuclear craze](#), as the Fukushima crisis demonstrates.

Vermont wins battle to close nuclear plant

This week Vermont won its years-long battle to close the aging Vermont Yankee nuclear plant and became the [fifth U.S. nuclear plant this year to be slated for early closure](#) as the U.S. nuclear industry retrenches. Decommissioning the plant will cost hundreds of millions of dollars and [will take decades to clear nuclear materials from the site](#). Of course, a decommissioning fight is brewing in Vermont, “a bastion of left-leaning politics, hippie capitalists as ice cream makers and craft brewers and organic gardeners, with [one of the most vocal—and sometimes effective—collection of anti-nuclear groups in the country.](#)”

Support Academy’s film project: “Silent killer: nuclear power and cancer”

As supporters of the World Business Academy, we appreciate your partnership for safe energy, a healthy planet, and a thriving economy.

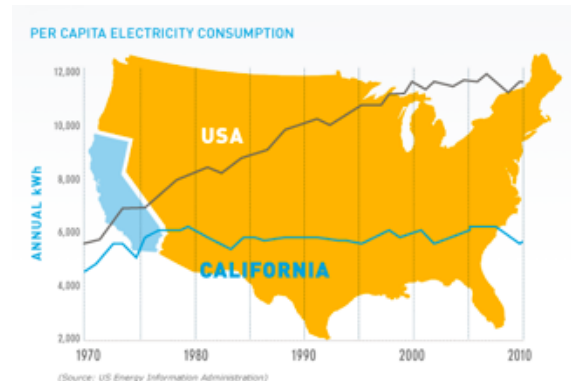
We're asking for your support for our new film project, *Silent Killer: Nuclear Power, Strontium-90, and Cancer*. It's more relevant than ever, with the ongoing Fukushima crisis. We just launched our Indiegogo campaign and ask you to [check it out](#), [contribute](#), and **share the link for the project with your circles** throughout the campaign that ends **Saturday, September 21**.

If you can help to get the word out and need more information or additional images for newsletters or an email blast, we're delighted to assist; please contact Nancy.Black@WorldBusiness.org

Visit the [Academy’s Safe Energy Project website](#) to read about the Academy’s nuclear work.

How California helped keep energy consumption almost flat

[Find out how](#) California’s model for energy efficiency has helped keep per capita energy use in the state almost flat while electricity usage in the rest of the U.S. continued to rise by 50%.





Sages & Scientists Symposium 2013



The Chopra Foundation’s [Fourth Annual Sages and Scientist Symposium](#), August 16 – 18, 2013, was “a fantastic journey into the intersection of science and spirituality.” A [world-class panel of scientists and sages](#) led

the symposium participants in exploring “a modern way to merge ancient insights with modern scientific theory.”

The participants recognized that despite the success of science on the technological front, without such a merger of science and ancient wisdom—“a contemporary synthesis where science and soul coexist comfortably ... our world cannot survive.”

[Academy President Rinaldo Brutoco](#) led a session, “Beyond Fossil Fuels,” which addressed energy and climate change imperatives.

Social Venture Network’s 2013 Innovation Award winners

Social Venture Network’s [2013 Innovation Awards winners](#) are changing the way the world does business, reducing waste, promoting health, and supporting education and employment in the developing world. One of the most notable innovations is a piece of paper that keeps fruits and veggies fresh 2-4 times longer, organically. With 25% of the world’s food supply lost to spoilage, [Fresh Paper by Fenugreen](#) is already a big hit.

An armchair conversation: Academy Fellow Lester Brown and Ted Turner

During an “Armchair Conversation” this month on the state of the world, [Academy Fellow Lester Brown](#) and CNN founder Ted Turner agreed that to get more businesses to convert from fossil fuels to renewable energy, we need to lower the income tax and impose a higher carbon tax. Their conversation was a featured event of the 10th annual American Renewable Energy Day summit in Aspen. [Read more.](#)



Photo credit: Leigh Vogel/The Aspen Times

Academy’s monthly radio show

The Academy’s monthly podcast, “[New Business Paradigms: Conscious Commentary on Business and Society](#),” covers the latest macro-economic trends and in-depth analysis of politics, business and society. The next show is September 12.

Ways to listen LIVE:

- Dial (347) 989-8946 and listen over the phone
- Pick up the live stream at our [Blog Talk Radio page](#)

Or listen to the recorded show any time after it airs: Past episodes can be streamed any time on our [website!](#)