



Why the *Washington Post* is wrong By the staff of Beyond Nuclear www.BeyondNuclear.org

Introduction

On April 23, 2012, the *Washington Post* editorial board proclaimed in a [lead editorial](#) that the Fukushima nuclear disaster in Japan was “non-catastrophic.” The writers eagerly promoted nuclear power while omitting inconvenient deal-breakers such as cost, waste, safety, health risks and human rights. The board taunted Germany and Japan - and the anti-nuclear movement - for looking to renewables but misrepresented Germany’s successes. They showed a shocking disregard for the suffering in Japan due to a very real catastrophe that is by no means over. And they utterly ignored those who have already paid the price for the nuclear fuel chain, like indigenous uranium miners, and its newest victims, the children of Japan whose future has been stolen.

Beyond Nuclear responds point by point in the order they were made in the *Washington Post* editorial:

1. *Washington Post* (WP) MYTH: Nuclear energy “is the only proven source of low-emissions ‘baseload’ power.”

FACT: There are a number of renewable energy technologies which can supply baseload power. In many regions, peak wind and solar production match up well with peak electricity demand. Numerous regional and global case studies – some incorporating modeling to demonstrate their feasibility – have provided plausible plans to meet 100% of energy demand with renewable sources. For example, the energy consulting firm [Ecofys produced a report detailing how we can meet nearly 100% of global energy needs with renewable sources by 2050](#). Approximately [half of the goal is met through increased energy efficiency](#) to first reduce energy demands, and the other half is achieved by switching to renewable energy sources for electricity production. The [Intergovernmental Panel on Climate Change agrees](#) and predicts close to 80% of the world’s energy supply could be met by renewables by mid-century.

2. WP MYTH: Germany and Japan are “giving up all of that guaranteed, low-carbon electricity generation in an anti-nuclear frenzy.”

FACT: Since nuclear power plants are reliant upon the electrical grid for 100% of their safety systems’ long-term power, and are shut down during grid failure and perturbations, it is “guaranteed” only as long as the electrical grid is reliable. When the Tsunami and earthquake hit and power was lost in the Fukushima Prefecture, nuclear energy wasn’t so “guaranteed.” Instead, it became a liability, adding to what was now a triple threat to the region and worsening an already catastrophic situation.

The Conservative German government is hardly in an anti-nuclear frenzy. Rather, it has seen

clearly that the renewable energy sector is already revitalizing home-grown industries like steel and ceramics. More people work today in Germany's renewable sector ([370,000 and growing](#)) than in the country's nuclear (30,000) and coal industries (20,000) combined. Even worn down shipyard areas in northern Germany are revitalized thanks to the offshore wind industry.

3. WP MYTH: Nuclear power is “low-carbon electricity”.

FACT: This is the propaganda line commonly used by the nuclear industry which conveniently leaves out every phase of the nuclear fuel chain other than electricity generation. It ignores the significant carbon emissions caused by uranium mining, milling, processing and enrichment; the transport of fuel; the construction of nuclear plants; and the still inadequate permanent management of waste. It also ignores the release - by nuclear power plants and reprocessing facilities - of radioactive carbon dioxide, or carbon-14, to the air, considered to be the most toxic of all radioactive isotopes over the long-term.

In fact, [studies show](#) that extending the operating licenses of old nuclear power plants emits orders of magnitude more carbon and greenhouse gases per kilowatt hour from just the uranium fuel chain compared to building and operating [new wind farms](#).

4. WP MYTH: “With all but one reactor offline, [Japan's] consumption of crude and heavy fuel oil for power generation has roughly tripled.”

FACT: Japan has long been the third largest oil consumer in the world, behind the US and China. But, unlike the US, Japan is looking at a rapid and meaningful deployment of conservation, energy efficiency and renewable energy immediately. The increase in Japanese oil imports has occurred because (a) pressure on Liquefied Natural Gas markets has led to such a price rise that gas is now more expensive than fuel oil per unit of energy generated and (b) the failure of nuclear power to ameliorate the twin natural disasters of 3/11 - and the subsequently wise precaution on the part of local authorities not to restart reactors shut down for maintenance - resulted in nuclear power being unable to contribute to needed electricity supply. Meanwhile, a special panel in Japan is looking at establishing feed-in tariffs for renewable energy, which will encourage investment in non-fossil fuel power plants. The feed-in tariff guarantees above-market rates for solar, wind, geothermal, biomass and hydroelectric power, thereby providing incentive to investment and expansion, a proven policy success in Germany.

5. WP MYTH: Germany's “electricity sector emits more carbon than it must after eight reactors shut down last year.”

FACT: The most recent emissions data show [the opposite is happening](#). Germany [reduced its carbon emissions in 2011 by 2.1 percent](#) despite the nuclear phaseout. The cut in greenhouse gases was mainly reached due to an accelerated transition to renewable energies and a warm winter. In addition, the EU emissions trading system caps all emissions from the power sector.

While eight nuclear power plants were shut down, [solar power output increased by 60 percent](#). By the end of 2011, renewable energies provided more than 20 percent of overall electricity. With record investments in an additional [7.5 Gigawatts of new solar](#) in 2011, the trend continues.

6. WP MYTH: With Germany and Japan “making the paths to their emissions goals more difficult, anti-nuclear activists justify this mess by insisting that renewable energy sources will pick up the slack. But that raises major questions of feasibility and cost.”

FACT: Japan is in an economic mess thanks to the compounding factor of the triple reactor meltdown added to the already devastating blow from the earthquake and Tsunami. So-called clean-up costs are already predicted at \$257 billion or higher (see point #9). Japan is smartly looking at renewables as the obvious choice to begin to “pick up the slack” since these can be deployed quickly, cheaply, reliably, cleanly and, above all, safely. Japan has also already demonstrated how conservation and energy efficiency can quickly be used to reduce use and demand in the interim and for the long-term.

Germany is far from in a “mess.” A home-grown small-town energy revolution is underway there, with more than 100 rural communities becoming 100% renewable. At least 50% of renewable energy on the German grid is provided by individuals and farmers.

As to cost, wind power is now the cheapest form of deployable energy after natural gas. The initial cost estimates for a single new 1,000 MW nuclear reactor now start at \$12 billion to \$15 billion each to build. This does not cover decommissioning costs at the end of the reactor’s life cycle which are estimated to be at least \$1 billion each but could soar higher. And after squandering decommissioning funds on a collapsing stock market, many reactor owners may not have the finances available to decommission plants when the time comes. By contrast, a 1,000 MW deepwater wind farm would cost \$6 billion including undersea cable with multiple grid connections and have no fuel costs, disaster recovery fund or long-lived toxic waste liability.

7. WP MYTH: “Japan could still reduce carbon emissions by 25 percent of its 1990 levels by 2030 without nuclear power. Yet even if that’s true, it’s hardly a reason to let all of that existing nuclear infrastructure and know-how go to waste.”

FACT: The *Post* makes a telling choice of words. Indeed, since December 2, 1942, when a team of scientists led by Enrico Fermi created the world’s first self-sustaining nuclear chain reaction in Chicago in order to make atomic bombs, the industry’s entire infrastructure has gone precisely there - to waste. Today the US has stockpiled more than 67,000 metric tons of irradiated nuclear fuel - and at least another 10,000 metric tons of radioactive waste from nuclear weapons - with nowhere to go.

Every nuclear power facility will eventually have to be decommissioned and its radioactive rubble isolated from the environment for centuries without a single watt of benefit for future generations. Yet nowhere in the *WP* editorial does it address this unsolved problem, perhaps the strongest argument against generating even more highly radioactive waste with no long-term solution in sight to protect or secure it. Radioactive wastes are produced at every stage of the uranium fuel chain — at mines, mills, chemical conversion and enrichment plants, during fuel fabrication, electricity generation and reprocessing, all of which remains inadequately protected and stored at US reactor sites.

8. WP MYTH: Germany “will instead rely on electricity imports from neighbors running old, reliable coal, gas and, yes, nuclear plants for years to come.”

FACT: Even after shutting its eight oldest nuclear power plants, Germany is still a [net exporter of electricity](#). In 2011, Germany [exported 6 TWh more than it imported](#). Additionally, German electricity exports to Europe's nuclear power house France [increased throughout 2011](#).

9. WP MYTH: The *Post* editorial writers describe the Fukushima Daiichi nuclear disaster as “scary but ultimately non-catastrophic.”

FACT: The *Post* is writing in the past tense about an accident that is not over. The extent of radioactive contamination is still unknown and growing by Tokyo Electric Power Company's own accounts. Unit 4 at Fukushima Daiichi remains precarious and could cause further, and greater, harm, given the amount of radioactive Cesium-137 (eight times more than released during the Chernobyl nuclear catastrophe) stored outside of radiological containment in its high-level radioactive waste pool on the brink of potential collapse.

But writing as if the accident is over is a minor misstep compared to the callous indifference shown by the *Post* editorial editors in dismissing the disaster as “non-catastrophic.” To the immense suffering already experienced in Japan will be added countless people who will sicken and die prematurely as a result of their exposure to the Fukushima radiation which spread across the world but affected Japan the most intensely. Many more will likely experience genetic damage since this is part of the clinical evidence on the no threshold effects of radiation exposure. According to Dr. Edwin Lyman, a physicist and senior scientist with the Union of Concerned Scientists, even if cancers don't turn up in population studies that “doesn't mean the cancers aren't there, and it doesn't mean it doesn't matter. I think that a prediction of thousands of cancer deaths as a result of the radiation from Fukushima is not out of line.” It should also be noted that cancers are by no means the only - and not necessarily in the majority - of negative health effects caused by radiation exposure which can include birth defects, spontaneous abortions, brain tumors, diabetes, heart disease, and genetic and teratogenic mutations.

The toll on human lives should not be evaluated by potential injuries and fatalities alone. School children cannot play outside; some have been evacuated far from their families; stress, grief and guilt have split families and entire communities apart; and farmers and fishermen have lost their livelihoods due to radiological contamination of land and sea. Thousands are being forced to accept permanent exile from their homes, jobs, friends, land and everything they once knew.

The fiscal cost is also a catastrophe. [Current estimates](#) for just the so-called “cleanup efforts” are now at \$257 billion but will likely rise. TEPCO's losses have risen to \$23 billion. With a 20km (12.4 mile) area around the stricken reactors a “dead zone” for a minimum of decades and potentially centuries, it is hard to know what more the *Post* editorial writers need to qualify as “catastrophic.”

10. WP MYTH: “Maintaining existing reactors — and, we would argue, including next-generation nuclear technology as a component in forward-looking anti-carbon policies — doesn't rule out a promising future for renewables, too.”

FACT: Actually, it does and has. In 1953, the Eisenhower Administration scrapped the last three years of the Truman Administration's Paley Commission energy policy work and its

recommendation to develop the nation's energy independence through solar power. Instead, Eisenhower, listening to a different set of policy advisers, launched the Atomic Energy Act and the myth of the "Peaceful Atom." The lion's share of energy subsidies and research and development dollars have gone to the US nuclear sector in the past 60-plus years, stunting growth in the renewables sector and critically retarding their deployment now when they are most needed for climate change.

Clinging onto the failed nuclear sector will simply continue to drain much-needed dollars from instead embarking on an essential and comprehensive renewable energy program in the US. In France, where nuclear has dominated 80% of electricity production, the country's renewable energy program is woefully inadequate - France even imports renewable energy from Germany when its reactors can't meet domestic demand.

The *Post* omits the inconvenient fact that nuclear might begin to address global carbon emissions if a reactor is built somewhere in the world every two weeks. But this is an economically unrealistic, in fact impossible, proposition, with the estimated construction tab beginning at \$12 billion apiece and current new reactors under construction already falling years behind schedule.

According to a 2003 MIT study, ["The Future of Nuclear Power,"](#) such an unprecedented industrial ramping up would also mean opening a new Yucca Mountain-size nuclear waste dump somewhere in the world "every three to four years," a task still unaccomplished even once in the 70 years of the industry's existence. Further, such a massive scale expansion of nuclear energy would fuel proliferation risks and multiply anxieties about nuclear weapons development, exemplified by the current concern over Iran. As Al Gore stated while Vice President: "For eight years in the White House, every weapons-proliferation problem we dealt with was connected to a civilian reactor program."

SUMMARY

The lessons of Fukushima demonstrate that, in a crisis, nuclear power can fail, dramatically compounding, rather than alleviating, a national emergency. The destruction of human and animal lives and the environment is too high a price to justify continued use, when quicker, safer, cheaper, non-carbon emitting alternatives are ready and available.

The *Washington Post's* choice to minimize the still unfolding consequences of the Fukushima nuclear disaster is reprehensible and irresponsible. The editors callously ignore the longstanding human suffering caused by the nuclear power fuel chain: from the indigenous peoples around the world who continue to sicken and die as they mine uranium; to the children of Japan, some of whose lives will now be cut short as a result of the Fukushima nuclear catastrophe.

The paper's taunting criticisms of Germany and Japan mirror those of some in Congress, who, lavished with campaign contributions and lobbying dollars by the coal, oil and nuclear industries, refuse to let go of 20th century thinking and the unwieldy, expensive and polluting energy technologies that forward-looking countries have chosen to phase out. Germany sees a bright business future and a revitalized economy in renewable energy investment. The *Post* argues that the US should continue to languish behind, clinging to dinosaur technologies that have no place in a modern world where global survival now hangs in the balance.

The editors urge that we build more reactors, and continue to use our existing, aging and vulnerable ones, thereby risking another Fukushima - or worse - in the US or anywhere in the world. The newspaper makes this case simply to prop up a failed, dangerous and expensive industry. It is an unacceptable argument from every perspective; financial, climatological, environmental, moral, ethical, technological and practical.

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