

YOU CAN'T *"NUKE"* GLOBAL WARMING

WHY NOT NUCLEAR POWER IN THE GLOBAL WARMING FIGHT?

- **it'll "break the bank;"** it's not remotely cost-effective in carbon displacement compared to other currently available means; there are simply better, faster and cheaper ways to do the job of reducing global warming gases in a timely manner (see: 1990 EPRI study, 7-Labs study; *Natural Capitalism*)
- **the implementation time-line is too long**, compared to both other available energy options and to the timeline required for effective climate intervention (within the next 10 years)
- increased nuclear reliance also means **increases in nuclear's currently unsolved problems** like:
 - nuclear wastes of all kinds
 - probability of accidents, unintentional leaks, more uranium mining, other contamination
 - proliferation of technology, expertise, materials, and ultimately nuclear weapons
 - increased risk from terrorist attacks in a post-9/11 world
- **it's questionable operational effectiveness** under expected global warming conditions (i.e., thermal damage to rivers; rising coastlines; more frequent and violent weather events; unpredictable availability of water as in the summer of 1988); hot weather makes nuclear power create other forms of unacceptable environmental damage
- it engenders **economic dependency** at best, and **nuclear "neo-colonialism"** at worst, in non-industrialized nations
- **it stifles the development, implementation and market share expansion of true local, sustainable and renewable energy resources and of energy efficiency;** furthermore, it ties up inordinate amounts of the investment capital required to expand these better resources
- **it proliferates** internationally the same set of unsolved problems nuclear power still has in developed countries, to countries that lack the capital, expertise, and political stability to manage it even at our current level of questionable standards
- **it vastly increases likely negative health and genetic effects** from allowable radiation releases, accidental releases, and statistically expected increases from large accidents

WHAT WE RECOMMEND:

- **real** emission reduction targets and programs, with carrots if possible and sticks if necessary, to achieve a 90% reduction in Greenhouse Gases by 2050.
- **real, mandatory** federal/state renewable portfolio standards (RPS) and vehicle mileage targets
- **aggressive expansion** of energy efficiency and renewable energy resources where appropriate, both domestically and internationally; support "20-20 Energy Vision" (20% renewable energy generation by the year 2020; see our website, www.neis.org)
- **planned elimination** of nuclear and fossil power plants using steam-cycles (i.e., water-dependent systems) to produce electricity
- **remove** nuclear power and carbon "sinks" from consideration for CDM credits
- **methodical preparation** for real, but not necessarily painful or economically disruptive lifestyle changes in areas where technologic or market innovation cannot succeed, exacerbate the old problems, or create/substitute new ones.

Previous statements against use of nuclear power for global warming abatement:

Natural Capitalism, Paul Hawkin, Amory and L. Hunter Lovins, 1999:

"The collapse of nuclear power - once the hope for displacing coal-burning -- might at first appear a setback for climate protection. Actually, it's good news. Since nuclear power is the costliest way to replace fossil fuels, every dollar spent on it displaces less climatic risk than would have been avoided if that same dollar were spent instead on techniques to use energy more efficiently, because those methods cost far less than nuclear power." pp. 249

"Slowing Global warming: A Worldwide Strategy" by Christopher Flavin, World watch Paper # 91 published by the Worldwatch Institute, October 1989:

". ...for nuclear power to offset even 5 percent of global carbon emissions would require that worldwide nuclear capacity be nearly doubled from today's (1989) level. That means that nuclear is simply not a medium term option for slowing global warming."

World on Fire by former Senator George Mitchell 1991:

"...If nuclear plants replaced all coal-fired plants in the world, global warming could be cut by 20 to 30 percent by the middle of the next century (2050). But it would require bringing a nuclear power plant on line somewhere in the world every one to three days for the next forty years. The cost would be \$9 trillion; the pace of construction would be ten times larger (greater?) than any the world has ever seen. Both figures are unthinkable.

"A totally safe reactor, a totally safe place to dispose of its deadly wastes, and a totally safe way to keep the wrong kind of nuclear materials from falling into the wrong hands -- none of these things have been resolved. By the time they are resolved, if they ever can be, it will be too late. The projected global warming will be full upon us."

Greenhouse Warming: Comparative Analysis of Nuclear and Efficiency Abatement Strategies, by Bill Keepin and Gregory Katz, Energy Policy, December 1988:

The authors posit a conservative scenario in which one-half of fossil energy is supplied by nuclear power with a construction program beginning in 1988.

"...This results in a total nuclear installed capacity of 8,180 GW by the year 2025, equivalent to some 8000 large nuclear power plants. This represents a 20-fold increase in world nuclear capacity, requiring that nuclear plants be built at an average rate of one new 1000 MW plant every 1.61 days for the next 37 years. At an assumed cost of \$1.0 billion/1000 MW installed, this results in a total capital cost of \$8.39 trillion (1987) dollars, an average of \$227 billion each year for 37 years to build the required nuclear plants. Total electricity generation cost is \$31.48 trillion, or an average of \$787 billion/year. The required capital investment is economically infeasible for the developing world..."

The authors point out that even with a massive nuclear construction program, the use of fossil fuels will continue to grow.

" Thus, in this scenario, even bringing a new nuclear plant on line every day and a half for nearly four decades does not prevent annual CO2 emissions from steadily increasing to a value 60% greater than they are today."

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