

Germany: Ending Nuclear Power has Contributed to Reducing Carbon Dioxide (CO2)

By <u>Washington's Blog</u> Global Research, April 03, 2013 <u>Washington's Blog</u> Region: <u>Europe</u> Theme: <u>Environment</u>, <u>Oil and Energy</u>

Nuclear Power INCREASES Carbon Dioxide

There has been a tremendous amount of <u>voodoo science</u> pushing the claim that radiation isn't harmful. (It is.)

Similarly, a new report published by Environmental Science & Technology <u>claims</u> that nuclear power saves more lives than it cost, due to reduction in carbon dioxide emissions.

However, *none* of the following words appear in the report:

- Construction
- Construct
- Building
- Build
- Facility
- Facilities
- Fabrication
- Steel
- Metal
- Concrete

Why is this important?

Because, as BBC notes:

Building the [nuclear] power station produces a lot of CO2

An International Forum on Globalization report – written by environmental luminaries Ernest Callenback, Gar Smith and Jerry Mander – have slammed nuclear power as <u>catastrophic for</u> <u>the environment</u>:

Nuclear energy is not the "clean" energy its backers proclaim. For more than 50 years, nuclear energy has been quietly polluting our air, land, water and bodies—while also **contributing to Global Warming through the CO2 emissions from its construction, mining, and manufacturing operations. Every aspect of the nuclear fuel cycle—mining, milling, shipping, processing, power generation, waste disposal and storage—releases greenhouse gases**, radioactive particles and toxic materials that poison the air, water and land. Nuclear power plants routinely expel low-level radionuclides into the air in the course of daily operations. While exposure to high levels of radiation can kill within a matter of days or weeks, exposure to low levels on a prolonged basis can damage bones and tissue and result in genetic damage, crippling long-term injuries, disease and death.

<u>See this excellent photographic depiction</u> of the huge amounts of fossil fuel which goes into building and operating a nuclear power plant.

Indeed, there is historical proof that ending nuclear will **decrease** c02 output. Specifically, PhysOrg <u>reported</u> last year:

A special issue of **the Bulletin of the Atomic Scientists**, published by SAGE, "The German Nuclear Exit," shows that the nuclear shutdown and an accompanying move toward renewable energy are already yielding measurable economic and environmental benefits, with one top expert calling the German phase-out a **probable game-changer for the nuclear industry worldwide**.

Freie Universität Berlin politics professor Miranda Schreurs says the nuclear phase-out and accompanying shift to renewable energy have brought financial benefits to farmers, investors, and small business;

Felix Matthes of the Institute for Applied Ecology in Berlin concludes the phaseout will have only small and temporary effects on electricity prices and the German economy;

Lutz Mez, co-founder of Freie Universität Berlin's Environmental Policy Research Center, presents what may be the most startling finding of all "It has actually decoupled energy from economic growth, with the country's energy supply and **carbon-dioxide emissions dropping from 1990 to 2011, even as its gross domestic product rose by 36 percent."**

Moreover – according to some scientists – there is actually <u>very little high-grade uranium</u> <u>left</u>:

The use of nuclear power causes, at the end of the road and under the most favorable conditions, approximately one third as much carbon dioxide emission

as gas-fired electricity production. The rich uranium ores required to achieve this reduction are, however, so limited that if the entire present world electricity demand were to be provided by nuclear power, these ores would be exhausted in nine years. Use of the remaining poorer ores in nuclear reactors would produce more CO2 emission than burning fossil fuels directly.

And Alternet points out:

Mark Cooper, senior fellow for economic analysis at the Vermont Law School ... found that the states that invested heavily in nuclear power had worse track records on efficiency and developing renewables than those that did not have large nuclear programs. In other words, **investing in nuclear technology crowded out developing clean energy**.

Many experts also say that the "energy return on investment" from nuclear power is <u>lower</u> <u>than many other forms of energy</u>. In other words, non-nuclear energy sources produce more energy for a given input.

David Swanson writes:

The energy put into mining, processing, and shipping uranium, plant construction, operation, and decommissioning is roughly equal to the energy a nuclear plant can produce in its lifetime. In other words, nuclear energy does not add any net energy.

Not counted in that calculation is the energy needed to store nuclear waste for hundreds of thousands of years.

Also not counted is any mitigation of the relatively routine damage done to the environment, including human health, at each stage of the process.

Nuclear energy is not an alternative to energies that increase global warming, because nuclear increases global warming. When high-grade uranium runs out, nuclear will be worse for CO2 emissions than burning fossil fuels. And as global warming advances, nuclear becomes even less efficient as reactors must shut down to avoid overheating.

The question isn't oil versus coal versus nuclear. **Decentralizing** energy production and storage is the real solution for the environment ... not building more centralized nuclear plants.

Unfortunately, environmentalists seem to have *fallen prey to nuclear power lobbyists*.

Update: One of the authors of the Environmental Science & Technology study – Dr. Pushker Kharecha – wrote to me and explained:

Despite the absence of those particular words, our analysis is indeed based on life-cycle GHG emission factors for each fuel — please see refs 30 and 34 of the paper, which we cite in Table 1.

Comment on Global Research Articles on our Facebook page

Become a Member of Global Research

Articles by: Washington's Blog

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca

<u>www.globalresearch.ca</u> contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca