

Dr. Adam Stein

Senior Nuclear Energy Analyst | @Dr_A_Stein



About

Dr. Adam Stein is the Senior Nuclear Energy Analyst at the [Breakthrough Institute](#) and an expert on the nuclear energy industry, focusing on the technological advancements of nuclear reactors and how they can revolutionize America's energy grid. Dr. Stein has 16 years of experience in the energy sector as a researcher and consultant, working at the nexus of technology and policy. Notably, his work was [published](#) by the Electric Power Research Institute, presented to the Nuclear Regulatory Commission, and contributed to many high-profile projects, including Oklo's Aurora, the first-ever license application for an advanced nuclear reactor in the U.S.

Background

- Ph.D., Engineering and Public Policy, Carnegie Mellon University
- Masters of Science, Engineering and Public Policy, Carnegie Mellon University
- Masters of Arts, Business, Indiana University of Pennsylvania
- Bachelors of Science, Mechanical Engineering and Nuclear Engineering, University of Pittsburgh

Recent Publications and Mentions

[Treadmill Decarbonization Doesn't Help](#) | [thebreakthrough.org](#)

Treadmill Decarbonization Doesn't Help examines how the well-intentioned decommissioning of nuclear power plants often leads to their replacement with fossil fuel plants, not other non-carbon emitting sources. Treadmill decarbonization — a concept coined by Dr. Stein — is the theory that replacing firm, clean energy sources, like nuclear energy, with other non-carbon emitting energy sources — wind, solar, etc. doesn't help make progress to reducing overall emissions, it results in running in place. To read the full article, [click here](#).

[In Defense of the Versatile Test Reactor](#) | [The Hill Opinion](#)

Dr. Stein, along with BTI founder and executive director Ted Nordhaus authored an OpEd exploring how the House and Senate's decision to zeroed out funding requested by the Biden administration for the Versatile Test Reactor (VTR) at Idaho National Laboratories could have disastrous impacts on America's role as a leader in the next generation of advanced nuclear technologies. To read the full article, [click here](#).

[The Real Cost of Closing Diablo](#) | [thebreakthrough.org](#)

Dr. Stein, along with the Breakthrough Institute's Director of Climate and Energy Zeke Hausfather and Deputy Director Alex Trembath, [published an analysis](#) of the Clean Electricity Performance Program (CEPP) proposal in the budget reconciliation bill and how it could cost California millions in fines and loss of billions in incentives if California policymakers keep their plan to shut down Diablo Canyon. The analysis was cited in *The Washington Examiner* [here](#).

Dr. Adam Stein

Senior Nuclear Energy Analyst | @Dr_A_Stein

Recent Publications and Mentions Cont.

[Interview on Carbon-free Fusion Energy | The Washinton Examiner](#)

In an interview with *The Washington Examiner's* Jeremy Beaman, Dr. Stein talks about the likelihood that nuclear fusion-generated energy will be dominant in the clean energy market over the next decade, saying that “the problem with fusion is it has to happen at very high temperatures and very high pressures, and while some companies have successfully done fusion processes, right now, they take more energy to put into the fusion reactor to make that happen, than you get back out in heat.” To read the full article, [click here](#).

[At the Doorstep of a Nuclear Energy Revival | The Well News](#)

Dr. Stein wrote in the Breakthrough Institute's monthly column *The Ecomodernist* at **The Well News** how advanced nuclear technologies can transform the nuclear industry. He called on the NRC and the federal government to adjust the approval process for new plants. To read the full article, [click here](#).

[Editorial on Closure of Diablo Canyon | The SacBee](#)

The Sacramento Bee Editorial Board [published a piece](#) emphasizing the likelihood that California will see an increase in fossil fuel consumption if Diablo Canyon's 2025 scheduled closure happens. The SacBee goes on to say that doing so would be antithetical to California's SB 100 goals to have a carbon-free energy grid by 2030. Prior to its publication, Dr. Stein and other Breakthrough analysts sat down with the board, discussing why the plant should stay open.

[Submitted Public Comment – Part 53 | Regulations.gov](#)

Dr. Stein [submitted a formal comment](#) to the Nuclear Regulatory Commission on their development of a new licensing framework for the deployment of advanced nuclear reactors, the next generation in nuclear energy technology, as required by the Nuclear Energy Innovation and Modernization Act (NEIMA) passed by Congress and signed into law in 2019. Dr. Stein's comment was cited by **Matt Yglesias'** in his [newsletter](#), **Slow Boring**.

[Open Letter to Congress](#)

Dr. Stein and Jameson McBride — Sr. Climate and Energy Analyst at Breakthrough — [authored an open letter](#) to Rep. Nancy Pelosi, Sen. Chuck Schumer, Rep. Eddie Bernice Johnson, and Sen. Joe Manchin urging Congress to expand federal tax credits for clean energy to include advanced nuclear energy. **Politico** mentioned the letter [here](#).

[Energy and Commerce Committee](#)

Dr. Stein's work has also been cited by Congressman Gary Palmer (R-AL) at the Energy and Commerce Committee in July of 2021. To watch the full committee hearing, [click here](#).