

Robert Socolow is Professor Emeritus and (full-time) Senior Research Scientist in the Department of Mechanical and Aerospace Engineering at Princeton University. He is the co-principal investigator (with ecologist, Stephen Pacala) of Princeton's Carbon Mitigation Initiative, www.princeton.edu/~cmi/, a twenty-year (2001-2020) project supported by BP.

Socolow seeks new conceptual decade-scale frameworks useful for climate change policy. He and Pacala authored “Stabilization wedges: Solving the climate problem for the next 50 years with current technologies” (Science, August 13, 2004). With colleagues, he introduced the concept of “one billion high emitters,” the world-wide upper and middle class whose lifestyles dominate global change. He has championed CO₂ capture and storage, energy efficiency in buildings, technological “leapfrogging” by developing countries, and policies that address the dangers of climate-change “solutions”, notably nuclear weapons proliferation and misuse of the land. He currently is interested in “committed emissions” and “unburnable carbon” – implications of never producing attractive fossil fuels.

Socolow was a member of the Grand Challenges for Engineering Committee of the National Academy of Engineering and the National Academies’ Committees on America's Climate Choices and America’s Energy Future. He chaired the Panel on Public Affairs of the American Physical Society (APS), and was the editor of *Annual Review of Energy and the Environment*, 1992-2002.

In 2014 Socolow became a Member of the American Academy of Arts and Sciences. He is a Fellow of the American Association for the Advancement of Science and a Fellow of the American Physical Society. His awards include the 2009 Frank Kreith Energy Award from the American Society of Mechanical Engineers; the 2005 Axelson Johnson Commemorative Lecture award from the Royal Academy of Engineering Sciences of Sweden (IVA); and the 2003 Leo Szilard Lectureship Award from the American Physical Society. (“for leadership in establishing energy and environmental problems as legitimate research fields for physicists, and for demonstrating that these broadly defined problems can be addressed with the highest scientific standards”).

Socolow received his B.A. (summa cum laude, 1959) and Ph.D. in theoretical high energy physics (1964) from Harvard University. He was an assistant professor of physics at Yale University from 1966 to 1971.