

UC SANTA BARBARA

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The Ultimate Win-Win?

We owe a lot to the Industrial Revolution. In addition to boosting the global economy and raising the standard of living, it ushered in a new era of manufacturing and innovation. At the heart of the revolution was the expansion of technologies used to make, refine and transport goods, and its lifeblood was fossil fuels, the source of energy that powered new machines and accelerated commerce.

Two centuries later, fossil fuels continue to be an energy source of choice for industrialized countries, but they are up against an ever-increasing fight against pollution and global warming. Debates rage between proponents of restricting the production and use of fossil fuels in the interest of the environment, and those who are concerned with how those restrictions could impact economic growth.

Google's Arun Majumdar, however, contends that environmental sustainability and economic strength are not mutually exclusive. To a large extent, current projections don't account for the growing ability of science and engineering-based research to launch a new industrial revolution, one that can create a sustainable energy future while keeping the economy strong.

In a talk titled "Energy & the Industrial Revolution: Past, Present & Future," Majumdar will discuss, among other things, the variety of research opportunities and challenges in the areas of stationary power and transportation systems, which could enable the transition of our energy economy to a sustainable one. Hosted by the UC Santa Barbara [Institute for Energy Efficiency](#), Majumdar's lecture begins at 4 p.m. on Monday, March 10 at UCSB's Corwin Pavilion.

As Google's Vice President for Energy, Majumdar oversees energy initiatives and advises the company on its broader energy strategy. Prior to his position at Google, he served in the U.S. Department of Energy from 2009 to 2012. Nominated by President Obama and confirmed by the Senate as the founding director of the Advanced Research Projects Agency – Energy, Majumdar also held appointments as the acting undersecretary of energy and as a senior advisor to the secretary of energy.

Before joining the Department of Energy, Majumdar was the Almy and Agnes Maynard Professor of Mechanical Engineering and Materials Science and Engineering at UC Berkeley and the associate laboratory director for energy and environment at Lawrence Berkeley National Laboratory. His research career includes the science and engineering of nanoscale materials and devices as well as large engineered systems. Majumdar is a member of the National Academy of Engineering and the American Academy of Arts and Sciences. He received his bachelor's degree in mechanical engineering at the Indian Institute of Technology, Bombay in 1985 and his Ph.D. from UC Berkeley in 1989.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.