

**Columbia's Department of Earth and Environmental Sciences
presents the second annual**

Arthur D. Storke Memorial Lecture

**Friday, May 7, 2010
3:30 p.m.
Monell Auditorium**

Reception to follow

The Carbon Shuffle and the Energy Challenge

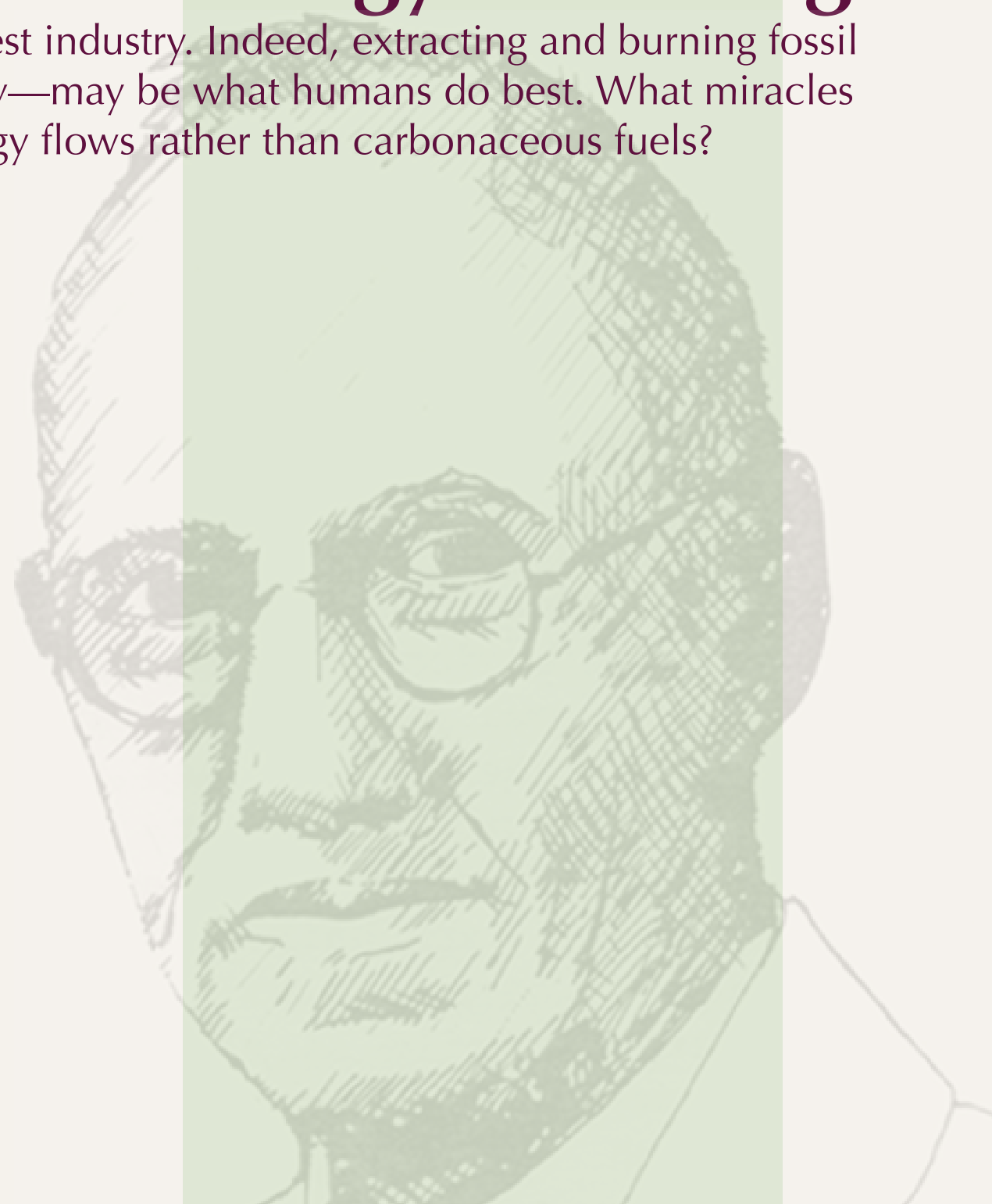
Moving carbon out of the Earth's crust is the world's largest industry. Indeed, extracting and burning fossil fuels—releasing some 22 million tons of carbon each day—may be what humans do best. What miracles would it take to run the human show on renewable energy flows rather than carbonaceous fuels?

Randy Udall

Writer, Activist, Energy Analyst

Arthur D. Storke, a native New Yorker, was born in 1894. By the 1930s, he was an active mining engineer, serving as managing director of a Rhodesian copper mine. During World War II, Storke became Britain's Minerals Advisor for the Allied cause and oversaw the covert shipment of pitchblende ore out of the Congo, material later used for the development of the atomic bomb. Storke met an untimely death in a 1949 plane crash. In his honor, Storke's wife left a bequest to Columbia University to fund the study of Earth's natural resources.

Lamont-Doherty Earth Observatory
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RANDY UDALL is one of the nation's leading activists in promoting energy sustainability. He served for 13 years as Director of the Community Office for Resource Efficiency (CORE) in Carbondale, Colorado, where his partnerships with electric utilities and local governments led to Colorado's first solar energy incentive program, the world's first Renewable Energy Mitigation Program and some of the most progressive green power purchasing programs in the country.

From 1982 until joining CORE in 1994, Randy was a free-lance writer specializing in the environment and related scientific topics, including energy efficiency, green buildings, acid rain, groundwater depletion, energy, clean air, global warming, and biodiversity. He also edited the quarterly newsletter of the Rocky Mountain Institute, a pre-eminent energy think tank.

Under Udall's leadership, CORE started the first "solar production incentive" program in the United States. The program pays customers who install PV systems per kilowatt-hour for their energy. In partnership with Holy Cross Energy, a rural electric utility in western Colorado, his efforts will keep 1 million tons of greenhouse gases out of the atmosphere over the next 20 years. Holy Cross now has more grid-connected photovoltaic systems than any of the 930 rural electric utilities in the nation.

In 2005, Udall co-founded the Association for the Study of Peak Oil-USA to track the shifting balance between world oil supply and depletion. He was one of the independent energy experts interviewed by the National Petroleum Council when they researched their 2007 report "Hard Truths about Energy". He is a frequent speaker and panelist on America's energy challenges and has keynoted many annual conferences, including the American Public Power Association, the American Wind Energy Association, and the American Solar Energy Society. He was recently featured in a CNBC documentary The Hunt for Black Gold.

Randy hales from a Western political family renowned for enacting conservation policy. He is the son of Morris (Mo) Udall, former Arizona congressman and the nephew of Stewart Udall, former Secretary of the Interior. His brother Mark and cousin Tom currently represent Colorado and New Mexico in the U.S. Senate - "a distinguished body that generally fails the energy IQ test."

An avid outdoorsman and backcountry skier, Randy skied across Baffin Island in the 1970s. Whenever he can get away with it, he escapes the grid and disappears into the high country of the Rockies and Sierras.