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Contact:  
Kristina Kershner  
505.930.7799  
kershner@architecture2030.org  
Architecture 2030

## **New Report Details Potential Devastation of Sea Level Rise Report Released at US Mayors' Sundance Summit on Global Warming**

SUNDANCE, UTAH - A coastal impact study issued today by Architecture 2030 makes clear that without a moratorium on coal, the United States will be unable to avert the dangerous impacts of climate change. Ed Mazria, founder of Architecture 2030, released the report at the Sundance Summit in Utah, a meeting of more than 40 mayors from across the country who are gathered to discuss the science behind and the local solutions to global warming. The study includes new visual imaging and reveals that, beginning with just one meter of sea level rise, many areas of the U.S. will experience devastating consequences.

The report is available at  
[http://www.architecture2030.org/current\\_situation/coastal\\_impact.html](http://www.architecture2030.org/current_situation/coastal_impact.html)

Mazria addressed the mayors at Sundance after a Sunday night keynote speech by Florida Governor Crist and welcoming remarks from Robert Redford, who hosts the annual event with Salt Lake City Mayor Rocky Anderson and ICLEI-Local Governments for Sustainability. More information about the Sundance Summit is at [www.sundancesummit.org](http://www.sundancesummit.org)

"Sea level rise is the greatest threat to the stability of our country. The daunting images in our study make clear that we, as a nation, will be physically under siege, vulnerable to catastrophic property and infrastructure loss with large population disruptions and economic hardship," said Mazria.

The US is a coastal nation, with over 12,000 miles of coastline. Fifty-three percent of all Americans live in and around coastal cities and towns. According to Architecture 2030's study, "Nation Under Siege", which examines 31 of these cities and towns, the US is extremely vulnerable to even small increments of sea level rise.

The key findings of the report include:

- Beginning with just one meter of sea level rise, the US is vulnerable to devastating consequences.
- At 450 ppm CO2 in the atmosphere, we will trigger potentially irreversible glacial melt and sea level rise. We are currently at 383 ppm, and are increasing atmospheric concentrations of CO2 at about 2 ppm annually. At this growth rate, we will reach 450 ppm by 2035 or sooner.

- As the most plentiful, cheapest and dirtiest fossil fuel, coal is positioned to push the planet beyond 450 ppm, and trigger dangerous climate change.
- Without a moratorium on coal, we cannot avert the dangerous impacts of climate change.

"There is still time to avert dangerous climate change, but we must act now. The window of opportunity is closing," stated Mazria. "The key to all of this is the amount of CO2 in the atmosphere," said Mazria.

According to the study, scientists are forewarning that, at approximately 450 parts per million (ppm) CO2 in the atmosphere, we will trigger potentially irreversible glacial melt and sea level rise. We are currently at 383 ppm, and are increasing atmospheric concentrations of CO2 at about 2 ppm annually. At this growth rate, we will reach 450 ppm by 2035, or sooner.

The study concludes that continued growth of CO2-producing infrastructure and emissions for another 10 years will make it impractical, and most likely impossible, to avert exceeding the 450 ppm threshold.

The study offers a two-pronged solution to the global-warming crisis: a moratorium on coal and implementing The 2030 Challenge, a strategy to dramatically reduce the energy consumption and CO2 emissions of the Building Sector. The US alone has 151 new conventional coal-fired power plants in various stages of development. Globally, at least one new conventional coal-fired power plant is being added each week. As the most plentiful, cheapest and dirtiest fossil fuel, coal is positioned to push the planet beyond 450 ppm, and trigger dangerous climate change. To illustrate the devastating effects of coal, Mazria provided a sobering tale:

Wal-Mart is investing a half billion dollars to reduce the energy consumption and CO2 emissions of their existing buildings by 20% over the next seven years. If every Wal-Mart Supercenter met this target the CO2 emissions from only one medium-sized coal-fired power plant, in just one month of operation each year, would negate this entire effort.

#### About Architecture 2030

Architecture 2030 was established in response to the global-warming crisis by architect Edward Mazria in 2002. Locally, nationally and globally, Architecture 2030 has been responsible for reshaping the debate surrounding climate change and GHG emissions to define and include a Building Sector.

Architecture 2030's mission is to rapidly transform the US and global Building Sector from the major contributor of greenhouse gas emissions to a central part of the solution to the global-warming crisis. To accomplish this mission, Architecture 2030 issued The 2030 Challenge to the Building Sector in January of 2006. By galvanizing and collaborating with the key players in this sector, including the Department of Energy (DOE), Environmental Protection Agency (EPA), US Green Building Council (USGBC), Leadership in Energy and Environmental

Design (LEED) American Institute of Architects (AIA), American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), US Conference of Mayors (USCM), and ICLEI-Local Governments for Sustainability. Architecture 2030 is working to achieve a dramatic reduction in the global-warming-causing greenhouse gas (GHG) emissions of buildings by changing the way they are designed and constructed.

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