



Solar 2 Educational Facility, Kiss + Cathcart Architects. New York City, NY.

EDITORIAL

Thanks to the efforts of E-News subscribers, the AIA, and the sponsorship of mayors from the four corners of the U.S., Albuquerque, Chicago, Seattle and Miami, the U.S. Conference of Mayors (USCM) formally adopted **'The 2030 Challenge'** in June, 2006. U.S. mayors sent the clear message that local leaders are willing to take action on the important issues of climate change and energy independence. And they *are* taking action. Mayors from 17 Texas cities, including Austin, Dallas and Houston, have formed a group, Texas Cities for Clean Air Coalition, to prevent the construction of more than a dozen new coal fired power plants in the state. A grassroots movement is taking hold as the Challenge has now formally been adopted by the 78,000 member American Institute of Architects (AIA), the City of Santa Fe, the County of Sarasota and the Rocky Mountain Institute. Globally, the International Council for Local Environmental Initiatives (ICLEI) North America unanimously passed support for Architecture 2030 and embedded its targets in their "Statement of Action" that was passed at the ICLEI Congress in July, 2006. A more formal endorsement process will be brought forward in November at the annual meeting of the ICLEI Executive Committee, the governing council that represents all ICLEI member nations.

However, policy alone cannot bring about the changes necessary in the Building Sector to effectively address dangerous interference with our climate system: professional design education must also play a key role. It is critical that design schools educate their students so they are ready to meet this new reality in the workplace. In the coming months we will issue THE 2010 IMPERATIVE to all professional design schools around the world, asking them to implement specific strategies to achieve complete ecological literacy in design education by 2010. To encourage quick action in the educational community, we will follow the announcement with an interactive Global Emergency Design Teach-In. Stay tuned.

In this issue, we are highlighting a new project by architects Kiss+Cathcart to be built in New York. This project is designed to be not only carbon neutral, but to produce more energy than it consumes. It is but one of many examples of firms that are now incorporating carbon neutral design into their practices.

September, 2006

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HIGHLIGHTS

Warming expert: Only decade left to act in time

'We have a very brief window of opportunity', NASA scientist James Hansen says.

[MSNBC News](#)

U.S. Mayor's Conference President Says 2030 Challenge Is Realizable

The president of the U.S. Mayor's Conference, Dearborn, Michigan, Mayor Michael Guido, says soaring energy prices and global warming research impelled the mayors to adopt the 2030 Challenge.

[Architectural Record](#)

California takes lead in U.S. global warming fight

California's Global Warming Solutions Act aims to cut emissions to 1990 levels, or around 25 percent, by 2020 with an enforceable cap and mandatory reporting for top polluters like energy companies.

[Boston Globe](#)

Solar 2 Educational Facility by Kiss+Cathcart Architects

Solar 2 is the new building project designed by [Kiss+Cathcart Architects](#) for New York environmental non-profit [Solar One](#), a project of the [Community Environmental Center \(CEC\)](#). This new and larger facility reflects the growing demand for Solar One's environmental educational services. The building itself is a case study, weaving the natural and urban world into its programmed spaces and illustrating how natural systems can be used in



urban buildings to reduce and eliminate fossil fuel energy use. Among its most striking features, the building incorporates a large 'greenscreen' to block unwanted eastern sunlight while serving as a physical reference to the building's environmental design features, in fact creating a porous barrier within which the urban and natural environments are weaved.

Features incorporated into the building design to reduce fossil fuel energy consumption include:

Design:

- Natural ventilation: wind-induced and stack-driven ventilation.
- Roof monitors and windows for daylighting
- Greenscreen
- Recycled materials

Technology:

- 85 kW array of PV's: The array is estimated to generate 92,716 kWh per year, about 108% of the projected demand of 86,030 kWh per year.
- Low wattage fixtures
- 50% efficient elevator
- Ground source heat pump

For more information on this building please visit:

[Solar 1](#)
[Kiss + Cathcart Architects](#)
[CEC](#)



All images used with permission from Solar 1

First page: south view

This page top: first floor lobby

This page bottom: systems diagram

City government pushing to make Santa Fe more 'green'

The City Council passed a resolution backing the 2030 Challenge, which sets a timetable to reduce emissions over the next quarter century.

[Santa Fe New Mexican](#)

Coal Carbon Capture Double Cost and Risky- Australian Study

Capture and storage of greenhouse emissions from Australia's coal-fired power stations will double the cost of producing electricity and could increase carbon dioxide emissions from power plants by about 30 per cent.

[The Canberra Times](#)

Rise in wildfires linked to climate change

A recent increase in wildfire activity has been correlated with rising seasonal temperatures and the earlier arrival of spring, a new study concludes.

[MSNBC](#)

How Melting Glaciers Alter Earth's Surface, Spur Quakes, Volcanoes

Imagine the surface of the Earth as a giant trampoline that accumulated a slab of ice over the winter, and you can get a sense of what a growing number of scientists say is in store for the planet as glaciers keep melting.

[Wall Street journal](#)

2030 SPEAKS

September 9-11, 2006

Washington University Masters Class
ARCHITECTURE 2030 Professional Education
Design Charrette
Redesign campus buildings to achieve the carbon-neutral goal of The 2030 Challenge.
Lecture: THE 2030 CHALLENGE
Edward Mazria AIA, Kristina Kershner
Washington University, St. Louis, Missouri

September 18, 2006

EGB Conference and Expo
Keynote: THE 2030 CHALLENGE
Edward Mazria AIA
Hyatt Lost Pines Resort and Spa
Austin, Texas
(not open to the public, registration required)
Contact: www.egbregistration.com/

September 26, 2006

Santa Barbara AIA / General Contractors/UCSB
Keynote: THE 2030 CHALLENGE
Edward Mazria AIA
Santa Barbara, California
(open to the public)
Contact: <http://www.sustainabilityproject.org>

September 28, 2006

Pacific Energy Center / AIA
Lecture/Meeting: THE 2030 CHALLENGE
Edward Mazria AIA
AIA San Francisco
San Francisco, California
(open to the public, registration required)
Contact:
<http://www.acteva.com/booking.cfm?bevaaid=116237>

October 11, 2006

EEBA Excellence in Building Conference
Keynote: THE 2030 CHALLENGE
Edward Mazria AIA
Hampton Roads Convention Center
Norfolk, Virginia
(open to the public, registration required)
Contact: June Kroog at 952 829 9099

October 19-21, 2006

58th Annual Conference of Southwest Foundations
Faculty: THE 2030 CHALLENGE
Edward Mazria AIA
Hyatt Regency Tamaya
Santa Ana Pueblo, New Mexico
(not open to the public)
Contact: For more information call 214 740 1787

September 16, 2006

Republicans for Environmental Protection
Conference
Keynote: ENERGY AND GLOBAL WARMING
Edward Mazria AIA
Marriott West Denver
Denver, Colorado
(not open to the public, registration required)
Contact: www.rep.org

September 25, 2006

University of Nevada Las Vegas / AIA / USGBC / ASES
Lecture: THE 2030 CHALLENGE
Edward Mazria AIA
Las Vegas, Nevada
(open to the public)
Contact: Alfredo Fernández-González at
alfredo.fernandez@unlv.edu

September 28, 2006

West Coast Green - Over the Tipping Point in 2006
Keynote: MEETING HUMANITY'S GREATEST CHALLENGE
Edward Mazria AIA
Bill Graham Civic Auditorium
San Francisco, California
(open to the public, registration required)
Contact: www.westcoastgreen.com

October 7, 2006

Design Fitness
2006 South Atlantic Regional Conference
Keynote: MEETING HUMANITY'S GREATEST CHALLENGE
Edward Mazria AIA
Chattanooga, Tennessee
(not open to the public, registration required)
Contact: Marvin J. Malecha at:
marvin_malecha@ncsu.edu

October 16, 2006

5th Annual Leadership Summit on Sustainable Design
Design Futures Council
Keynote: THE 2030 CHALLENGE
Edward Mazria AIA
La Fonda Hotel
Santa Fe, New Mexico
(not open to the public)
Contact: For more information call 770 209 3775

October 26-27, 2006

US Conference of Mayors
IMPLEMENTING THE 2030 BUILDING CHALLENGE
2nd National Summit on Energy and the Environment
Keynote: IMPLEMENTING THE CHALLENGE
Edward Mazria AIA
Atlanta, Georgia
(not open to the public)
Contact: Debra DeHaney-Howard at 202-861-6702

Arctic ice melting rapidly, study says

Arctic sea ice in winter is melting far faster than before, two new NASA studies reported Wednesday, a new and alarming trend that researchers say threatens the ocean's delicate ecosystem.

[Forbes](#)

Sun 'not to blame' for global warming

The sun's energy output has barely varied over the past 1,000 years, raising chances that global warming has human rather than celestial causes, a study shows.

[ABC News](#)

Go to [News/Resources](#) section of architecture2030.org to get the latest news updates on issues regarding climate change and the building sector.

Comments and suggestions for future Architecture 2030 E-news issues should be sent to:
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