in this issue

LETTER FROM THE CHAIR

AIA 2030 UPDATE
COTE committee member Tim Murray gives us an update on the AIA 2030 Challenge and discusses how you can join the commitment to increase our energy reduction to 80% over the next decade.

COVID-19 AND SUSTAINABILITY

AIA COTE TOOL KIT

ENVIRONMENTAL LIVE WEBCAMS AND EDUCATION

UPCOMING COTE EVENTS

Houston COTE: Galveston Bay Park Webinar, Thursday, May 14, 2020 at 12:00 PM

San Antonio COTE: Carbon Positive Webinar, Wednesday April 29th, 2020 at 12:00 PM

Dallas COTE: Design for Ecology and Water, Tuesday, June 16, 2020 at 5:00 PM

Sustainability CEUs: Visit the GreenHome Institute for some opportunities.

FAMILY EDUCATION

Looking for some educational activities for your family while you’re at home together? Or maybe just want to stay in tune with your favorite organizations? We’ve compiled a list of live webams, virtual tours, educational videos and more. Click the links below:

- 12 Historic Sites Virtual Tours
- Monterey Bay Aquarium Live Cams
- At Home with the Bay by the Galveston Bay Foundation
- Houston Audubon's Digital Library
- National Environmental Education Foundation Activity Guides
- National Oceanographic and Atmospheric Administration Activities
The AIA 2030 Commitment is a “platform for architects… to demonstrate climate action through energy-efficient design”, based on the strategy introduced by Ed Mazria of Architecture 2030 to reduce building project’s energy use over time, reaching net-zero by the year 2030.

Introduced in 2006, the current reduction threshold is 70% below the US average for fossil fuel, greenhouse gas-emitting, energy consumption performance standard for building types based on 2003 CBECS. Reduction standards will further increase to 80% in 2020, 90% in 2025, and carbon-neutral in 2030. The building sector is responsible for 39% of all carbon emissions, so we in the design industry have a unique opportunity to make a substantial impact in reducing emissions.

**2018 Global Summary**

AIA released its “2018 AIA 2030 By the Numbers” report in September 2019 with data from 252 firms submitting project portfolios to the 2030 commitment. This may sound impressive, but the AIA recognizes 17,000 firms, so only 1.4% of firms are actively engaged.

Many of these firms are the big ones, so that does translate into an impressive amount of projects and building area. AIA notes that for the last six years, the AIA Architecture Firm Award recipient was a 2030 signatory and more than 70% of AIA-award winning projects were designed by 2030 signatories.

Those 252 firms reported 3 billion square feet across 92 countries for an average predicted energy use (pEUI) reduction of 46%, the best year ever but far short of the current 70% target.

Only 16 firms achieved the target of 70% reduction or greater across their entire submitted portfolio.

Only about half of the submitted projects had energy models generated. Those projects that were modeled had a 25% better pEUI than non-modeled projects, which AIA calls a “significant missed opportunity.”

2018 was the first year that AIA began to track major renovations separately from new construction. Major renovations averaged a 45% pEUI reduction, similar to new construction.

For more information, see the complete AIA 2030 2018 By the Numbers report here.

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AIA 2030 (con’t)

Author: Tim Murray

Ready to Join the AIA 2030 Commitment?
Joining the AIA 2030 Commitment is easy. You may have some misconceptions about committing. Know that your project data is confidential and anonymous. Plus, you do not have to meet the 70% energy reduction to participate. The primary purpose is to track your energy reduction progress over time and integrate design decisions that impact your project’s energy performance. The first step is uploading a 2030 Commitment Letter signed by firm leadership and creating a firm profile. Your firm then has six months to create a Sustainability Action Plan (SAP). This SAP not only addresses your strategies to pursue the 2030 goals, but also includes internal activities your firm is undertaking to promote sustainability.

Then on an annual basis, report project energy data for all projects in a design phase. AIA 2030 uses the Design Data Exchange (DDX) online tool to report project data. Projects with energy models typically perform better, but the DDX has established baseline reductions for all standard energy codes, so energy models are not a requirement for reporting.

Reporting for the previous year is due on March 31 to be included in the national annual report. However, you can input project data at any time. New construction projects use energy use intensity as their metric. Interior-only projects are also reported and use lighting power density (LPD) measured in watts of lighting/sq. foot as their metric. The current LPD goal is a 25% reduction.

Another useful tool within the DDX is the research interface. You can compare your projects with the anonymous entries of other firms’ portfolios. Break it down by building types, geographic areas, building size and more.

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What does the future hold for the AIA 2030 Commitment?
In 2020, the energy reduction threshold jumps to 80%. That’s high, but then 2030 is only ten years away and the vast majority of firms are not on track to achieve the net zero goal. Never has the urgency of the underlying goal of the 2030 Commitment been more pressing. Not only will the target thresholds increase over the next decade, but AIA 2030 will be revising the DDX interface to make it more user friendly. Operational carbon will be added to analyze if the modeling tools we are using are accurately predicting energy use. Embodied carbon captured in building materials will also become a metric as it represents 28% of the building sector emissions, taking its place alongside the operational carbon we already track.

And lastly, spread the word. If you know of firms not participating in the AIA 2030 Commitment, encourage them to join. We need the entire industry involved. It may be a friendly competition, but we all need to cross the finish line together.

To join the AIA 2030 Commitment or to get more information, check out the AIA 2030 Homepage.

SUSTAINABILITY AND COVID-19

The environment has seemed to have made some great progress during the pause of normal human activity. Canals in Venice have cleared and air pollution in China has reduced significantly.

Locally, in Houston, many companies work 9 days across two weeks at 80 hours, with every other Friday off with the hope that pollution is reduced on those “other” Fridays. With our new normal the past few weeks, it could be interesting to examine how certain business industries can become more flexible in the way they work in the future to help maintain some of the benefits the environment is currently seeing.

For further information, check out our sources below:
- Forbes - Study: Coronavirus Lockdown Likely Saved 77,000 Lives in China Just By Reducing Pollution
- NASA - How the Coronavirus Is (and Is Not) Affecting the Environment

AIA COTE TOOL KIT

For over 20 years the COTE Top Ten Awards has been the AIA’s preeminent award program for sustainable design. COTE members developed tools to evaluate submitted projects based on key aspects of sustainable design. These criteria require architects to provide tangible metrics and reference project benchmarks to help measure the success of projects. In the process of developing these criteria, COTE realized that these same tools would be an excellent design resource for architects to promote sustainability and have more meaningful conversations on the front-end of projects. Last year, COTE officially adopted these 10 measures as the Framework for Design Excellence.

For further information about each of the 10 design measures, as well as an interactive spreadsheet to grade your own projects, see the links below:
- Framework for Design Excellence Summary
- COTE Super Spreadsheet

50TH EARTH DAY

The Discovery Green Conservancy has cancelled all Earth Day Houston events that were previously scheduled for April 19, 2020. Please join the international community as they take the event digital.