AIA 2030 COMMITMENT

Getting to Zero Forum

Number of Zero Energy Buildings

Fig 2. There are now 67 ZE Verified and 415 ZE Emerging projects documented by NBI.

emerging

verified
• Voluntary program that builds on Architecture 2030 framework

• Goal is to transform the practice of architecture in a way that is holistic, firm-wide, project-based and data-driven, to prioritize energy performance and carbon reductions in design toward carbon neutral buildings, developments and major renovations by 2030.

• Firms “sign on” to commitment and report progress annually
AIA 2030 COMMITMENT

1. SIGN ON
Firm leadership signs a letter of commitment

2. MAKE A PLAN
Create a Sustainability Action Plan for your firm. Review every 3 years.

3. TRACK DATA
Track your firm’s projects’ data within the Design Data Exchange (DDx) anonymously. Reported data will protect project identity and firm performance.

4. REPORT
Report your firm’s projects once a year. Annual reporting cycle closes 3/31.

AIA 2030 COMMITMENT | FIRM COMMITMENT LETTER
AIA 2030 COMMITMENT | EUI & BASELINE

2030
EUI reduction compared to 2003 CBECS database (Architecture 2030 Zero Tool)

CA T24
TDV energy reduction compared to prescriptive requirements

LEED
Energy cost savings compared to ASHRAE 90.1-2016 (v4.1)
Our progress is not keeping pace with the growing urgency and impacts of climate change.

In 2008, Architecture 2030 set an ambitious roadmap to achieve carbon neutrality in new buildings by 2030 with incremental targets increasing every five years.

Although the average pUE increased to 69% this year (the highest since 2011), the rate of improvement is unlikely to achieve 60% zero net carbon design by 2030 without exponential change. Along with continued incorporation of proven energy efficient design strategies, we will also need to increase our use of energy modeling and incorporate on- and off-site renewable energy to reach these targets.

Solutions / Projects meeting and exceeding the mark

- 712 projects were designed to meet the 70% pUE reduction target.
- 4,526 projects by 130 firms were designed to meet the 25% lighting power density (LPD) reduction target.
- 165 firms reported projects that were designed to meet the 70% pUE reduction target.
- 131 zero net energy projects (reducing 100%) or higher pEUI reductions were reported by 67 firms.
2030 Commitment: WHERE WE SUCCEED

- Accessibility
  - Written in a language that generalists can understand and engage with
  - One number (% reduction)
2030 Commitment: WHERE WE ...suck.

• Accessibility
  • Written in a language that generalists can understand and engage with
  • One number (% reduction)

• Participation
  • 549 Firm Signatories
  • 44/50 states and International
  • 10b square feet of projects
  • Other impacts (carbon, $, etc)

• Knowledge leadership
  • Education, awareness and communication tool within firms

2030 culture at LEDDY MAYTUM STACY Architects
2030 culture at LEDDY MAYTUM STACY Architects

**Improved energy literacy.**
We are a team of generalists who can speak fluidly to clients about benchmarking, EUI, carbon, etc. ...across ALL projects.

**Not settling for code compliance models.**
Title 24 does a lot, but modeling loopholes prevent more accurate understanding of performance.

**Asking bigger questions.**
2030 is a framework that is pointing in the right direction; it inevitably brings up “bigger” issues relating to density, holistic carbon footprints and designing for equity.

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**Percent EUI reduction**

<table>
<thead>
<tr>
<th>Year</th>
<th>LMS projects</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>0%</td>
</tr>
<tr>
<td>2011</td>
<td>10%</td>
</tr>
<tr>
<td>2012</td>
<td>20%</td>
</tr>
<tr>
<td>2013</td>
<td>30%</td>
</tr>
<tr>
<td>2014</td>
<td>40%</td>
</tr>
<tr>
<td>2015</td>
<td>50%</td>
</tr>
<tr>
<td>2016</td>
<td>60%</td>
</tr>
<tr>
<td>2017</td>
<td>70%</td>
</tr>
<tr>
<td>2018</td>
<td>80%</td>
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2030 goal
2030 culture in the BAY AREA
2030 Commitment

2017 Projects Meeting 2030 Challenge

Madison Fire Department Station 14  Normal Public Library  Polk County Criminal Courts  Iowa City Hoover Elementary

Logan Contractor Supply  Madison Public Library Support Center  Johnson County Ambulance Center  Polk County Justice Center
Fire Station EUI (Kbtus/sf/year)

<table>
<thead>
<tr>
<th>Year</th>
<th>EUI (Kbtus/sf/year)</th>
</tr>
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<tbody>
<tr>
<td>2003</td>
<td>120</td>
</tr>
<tr>
<td>2005</td>
<td>80</td>
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<tr>
<td>2009</td>
<td>60</td>
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<td>2014</td>
<td>40</td>
</tr>
<tr>
<td>2020</td>
<td>20</td>
</tr>
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</table>

Tate Walker / OPN Architects 061319
2030 Commitment: Focus on the Future

• Switch from Net Zero Energy to Net Zero Carbon
• Role of RECs and Offsite Renewables
• Embodied Carbon and Existing Buildings

Good design = high performance