

# **AIA** 2030 COMMITMENT

Getting to Zero Forum

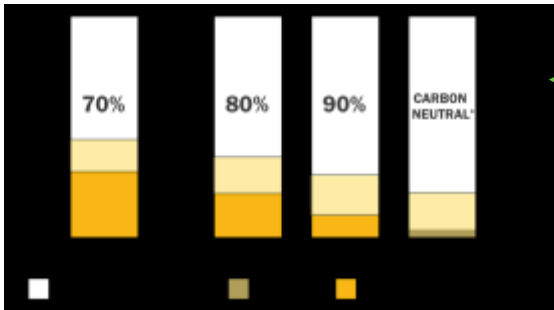
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Fig 2. There are now 67 ZE Verified and 415 ZE Emerging projects documented by NBI.



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## AIA 2030 COMMITMENT

- 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

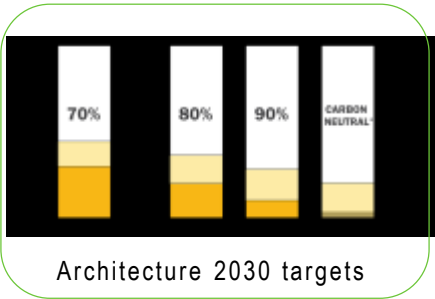
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AIA 2030 COMMITMENT | 549 SIGNATORY FIRMS

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### AIA 2030 COMMITMENT

AIA 2030  
Commitment  
framework



**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.

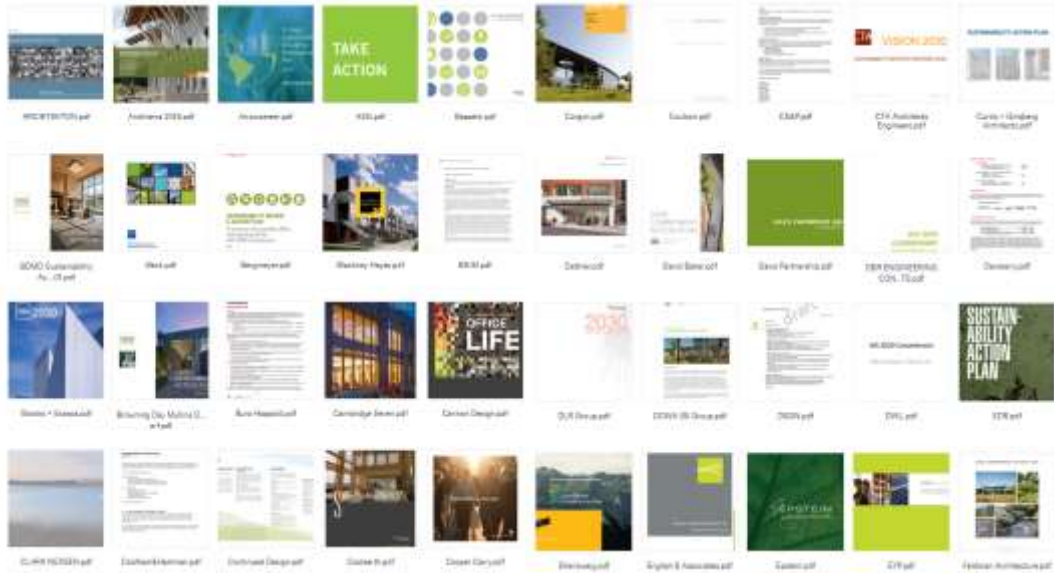
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### AIA 2030 COMMITMENT | FIRM COMMITMENT LETTER



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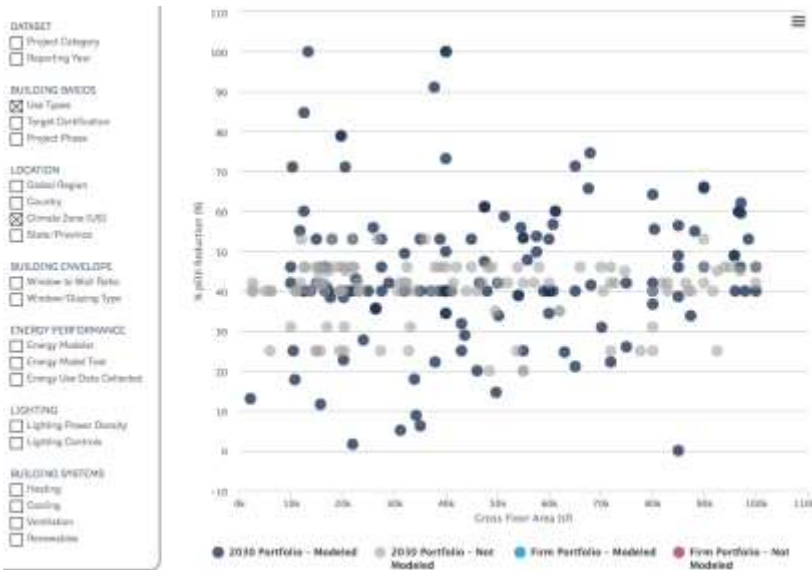
## AIA 2030 COMMITMENT | SUSTAINABILITY ACTION PLAN



Download examples: <https://www.dropbox.com/sh/cq0g3s5f3ua3scj/AACREITsLk5GKhHgUga5fAda?dl=0>

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## AIA 2030 COMMITMENT | DESIGN DATA EXCHANGE



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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)

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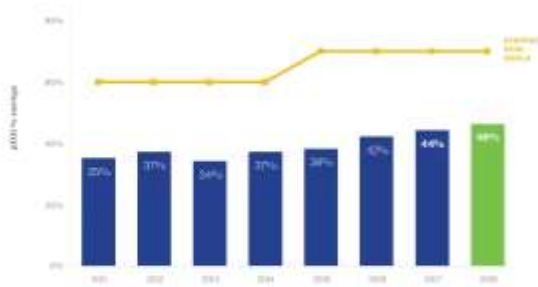
## 2030 BY THE NUMBERS

The 2018 summary of the AIA 2030 Commitment.



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**URGENCY** / Progress to 2030 goals



**OUR PROGRESS IS NOT KEEPING PACE WITH THE GROWING URGENCY AND IMPACTS OF CLIMATE CHANGE**

In 2006, Architecture 2030 set an ambitious mission to achieve carbon neutrality in new buildings by 2030 with incremental targets increasing every five years.

Although the average pEUI increased to 45% this year (the highest ever) from 44 in the prior year, the rate of improvement is unlikely to achieve 100% zero net carbon weight 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.

ILLUSTRATION BY THE BUREAU

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**SOLUTIONS** / Projects meeting and exceeding the mark

**712 projects**  
were designed to meet the 70% pEUI reduction target.

**165 firms**  
reported projects that were designed to meet the 70% pEUI reduction target.

**4,526 projects**  
by 130 firms were designed to meet the 25% lighting power density (LPD) reduction target.

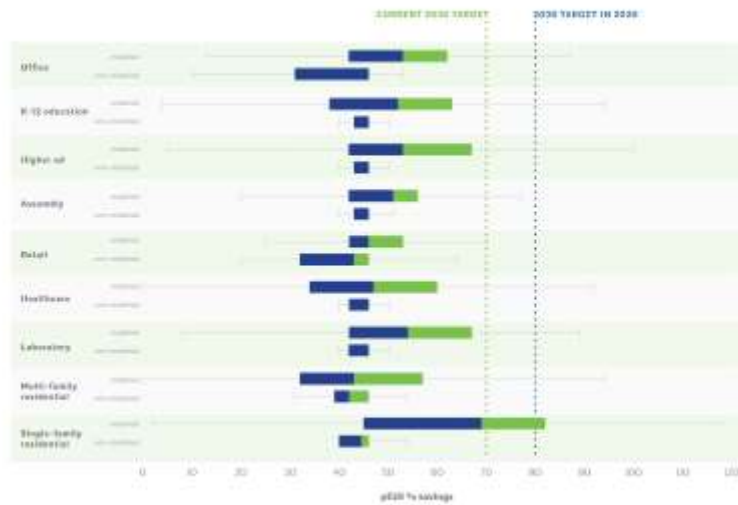
**131 zero net energy projects**  
(achieving 100% or higher pEUI reduction) were reported by 57 firms.

ILLUSTRATION BY THE BUREAU

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## SOLUTIONS / Impact of energy modeling on pEUI savings



Source: ASHRAE 2019

### ALL USE TYPES CAN MEET THE CURRENT 2030 TARGETS, BUT ONLY WITH ENERGY MODELING

The 2019 data shows that most use types will be able to meet the more challenging 2030 target, 60% pEUI reduction. Energy modeling will become even more important as the targets become more challenging in 2020, 2025, and 2030.

Key



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## 2030 Commitment: WHERE WE SUCCEED

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

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## 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

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2030 culture at LEDDY MAYTUM STACY Architects



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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.**

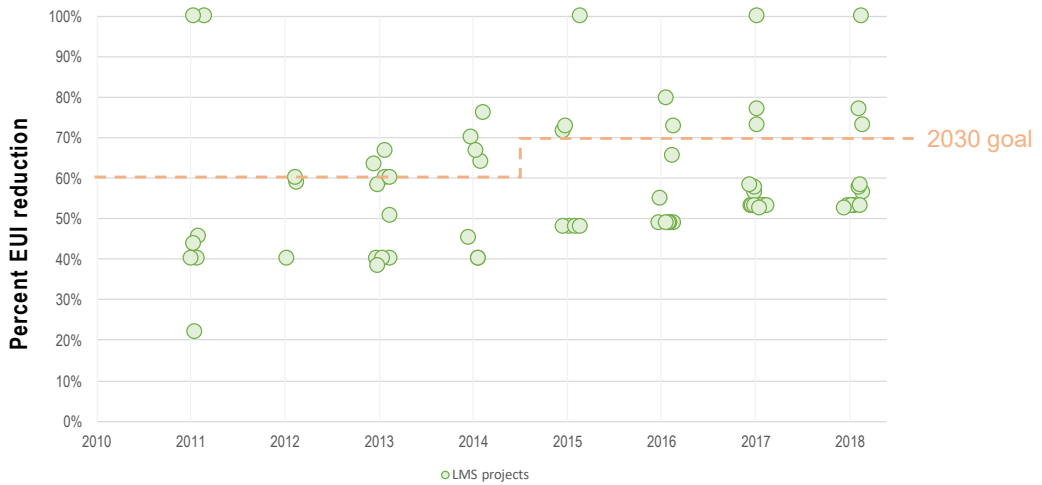
Title 24 does a lot, but modeling loopholes prevent more accurate understanding of performance.

**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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2030 culture at LEDDY MAYTUM STACY Architects



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2030 culture in the BAY AREA

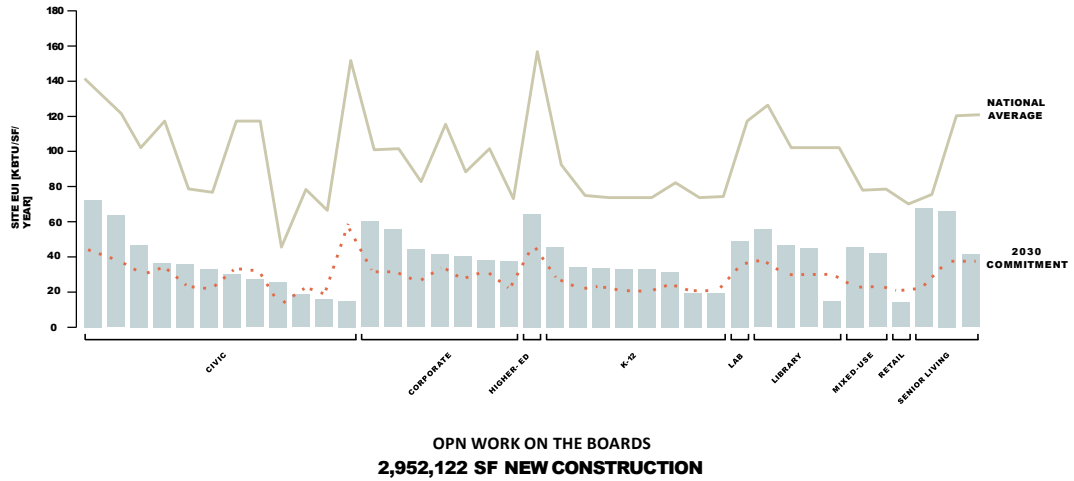


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### 2030 Commitment



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### 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



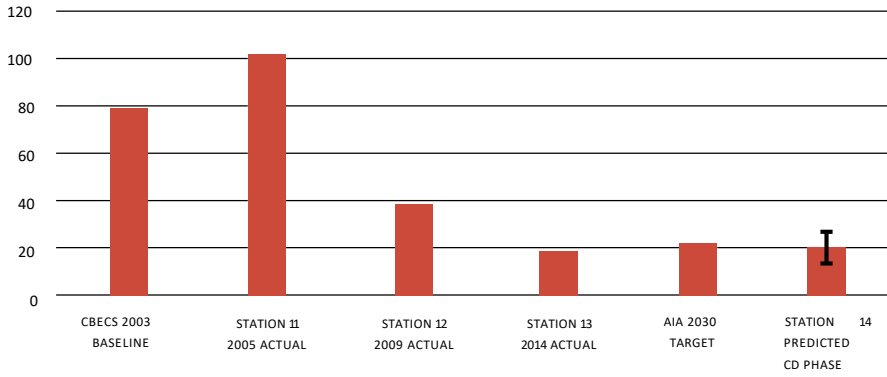
Johnson County Ambulance Center



Polk County Justice Center

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Fire Station EUI (KBtus/sf/year)



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## 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**



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