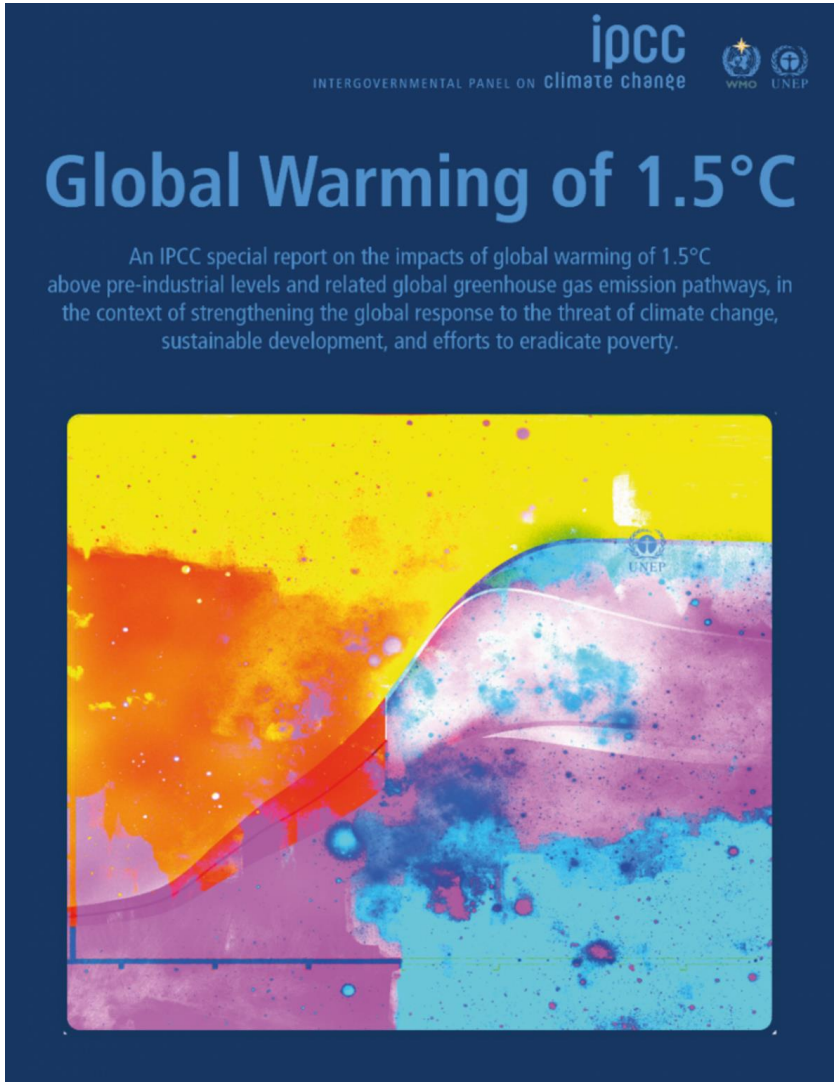
AIA 2030 COMMITMENT

Climate change

and the role of the architect

In 2018, The United Nations' Intergovernmental Panel on Climate Change reported the need to limit global temperature change to 1.5 degree Celsius, requiring "rapid and far-reaching" improvements to reach net zero by 2050.

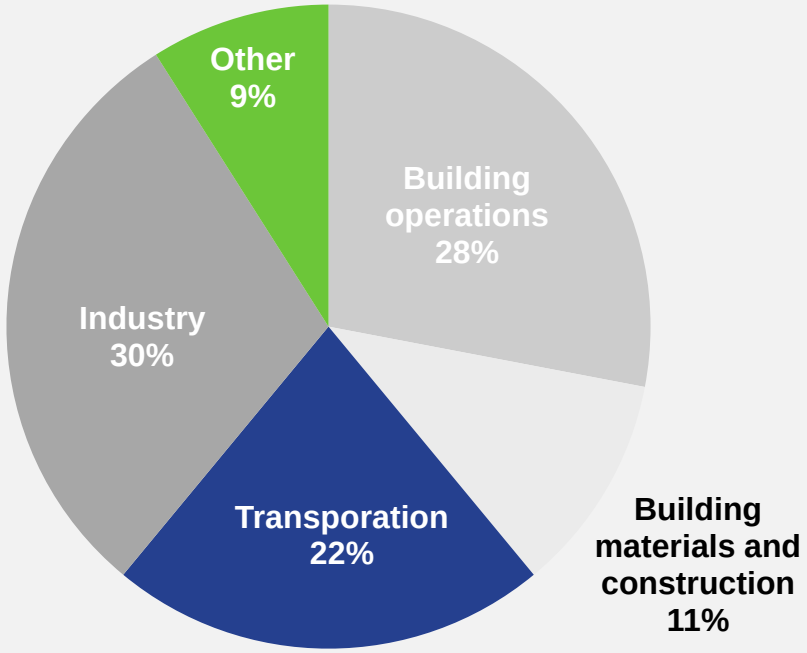


Building operations are responsible for about 30% of greenhouse gas (GHG) emissions globally.

In some cities, building operations account for more than 70% of GHG emissions.

Embodied carbon emissions from (core and shell) materials and construction are estimated to be another 11% of GHG emissions globally.

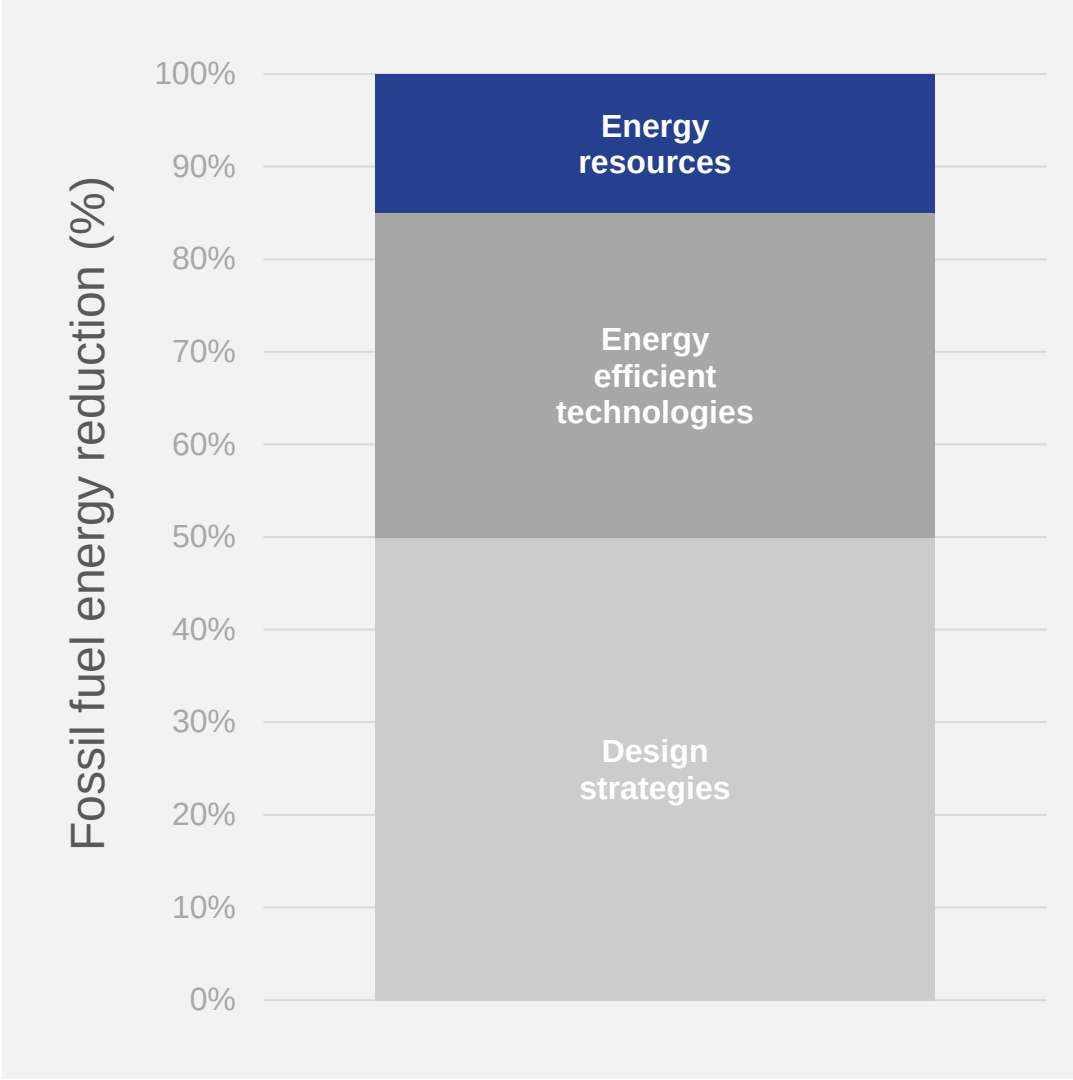
Global CO_2 emissions by sector



DATA SOURCES: UN Environment Global Status Report 2017. EIA International Energy Outlook 2017.

Design strategies have the greatest impact on building energy use.

Architects have the greatest impact on design strategies early in the design process..



The consequences of climate change are alarming, but they are not inevitable.

As professionals continue to coalesce around shared values and common goals, the opportunities for meeting the challenge expand. In 2019, AIA member overwhelmingly passed a resolution for “urgent and sustained climate action.”

The time to start is now!

2006 — **Architecture 2030 publishes the 2030 Challenge**

2009 — **AIA establishes the AIA 2030 Commitment**

2019 — **AIA Resolution on Climate Change passed at the AIA’s 2019 National Convention.**

Until zero-net carbon practice is the accepted standard of its members, the AIA will prioritize and support urgent climate action as a health, safety, and welfare issue, to exponentially accelerate the “decarbonization” of buildings, the building sector, and the built environment.

The fight against climate change will play out in our cities and their buildings as we double the current global building stock—making zero net carbon new construction an imperative, not an option.

Of the 113 million existing buildings in the US, about half will need a retrofit over the next decade.

Each of the 20,000 architecture firms in the US could perform 250+ building retrofits annually and there would still be work to be done.

< **Interior restoration at St. Patrick's Cathedral, a 2019 COTE® Top Ten recipient.**

ARCHITECT Murphy Burnham & Buttrick Architects
PHOTO © Whitney Cox

“You can’t have climate change without sacrifice zones, and you can’t have sacrifice zones without disposable people, and you can’t have disposable people without racism.”

- Hop Hopkins, *Sierra,* June 2020

Making the Commitment

and becoming a 2030 signatory

The mission of the AIA 2030 Commitment is to transform the practice of architecture in a way that is holistic, firm-wide, project based, and data-driven.

Participants prioritize energy performance as they work toward carbon neutral buildings, developments and major renovations by 2030.

“One of the things I was really fearful about this process was how much of our work is repeat clients and how difficult I was imagining it to be to go to our repeat clients and say ‘We haven’t been doing a very good job and we really want to do better.’ And I have to say in the last few months that I’ve been talking with our repeat clients, they have been extraordinary in accepting their responsibility and accepting their commitment with us. And there hasn’t been a whole lot of re-hashing of ‘why didn’t we do this better before?’ So I think our clients are saying we’re all in this together and please don’t let that be an excuse for not moving forward with this.”

- Shawn Evans, AIA, Principal at AOS Architects

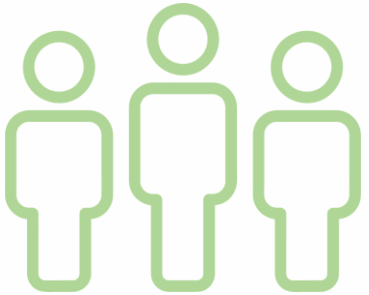
2030 Commitment myths

MYTH	FACT
× It takes too much time.	✓ Typical time to gather and input data is less than 30 minutes.
× It requires too many resources.	✓ The program is free! A variety of resources are available to support you.
× I may have poor-performing projects in my portfolio.	✓ All data is aggregated and anonymous.
× I'll have to achieve the 2030 targets.	✓ Making progress is more important than meeting the targets.
× The project must be complete.	✓ 2030 is a framework to set energy targets early in the design and track progress at each phase.

Benefits for 2030 signatory firms

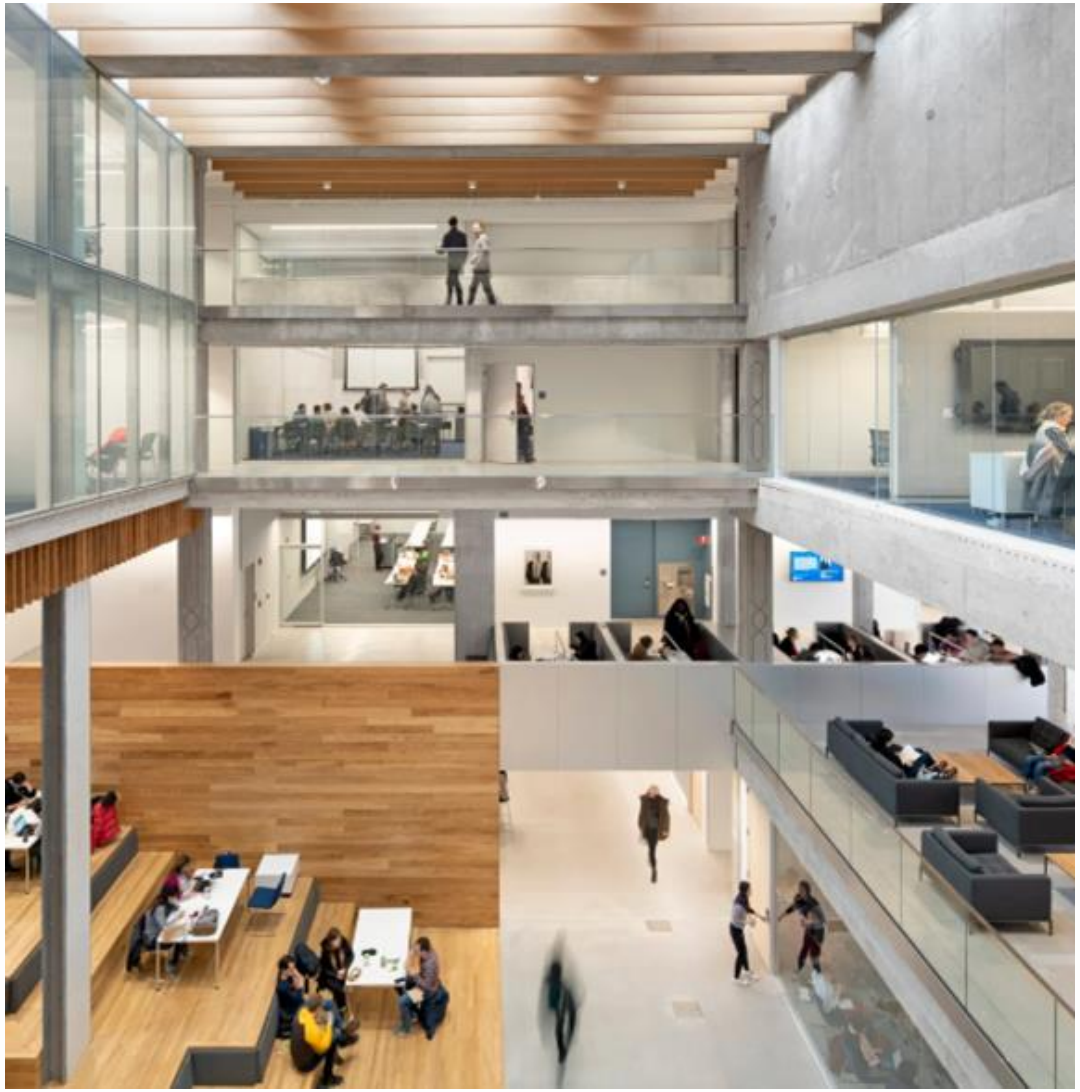
Be a climate leader.

Master your data.



Attract clients and retain talent.

Get recognized.



2030 signatories are leaders in the profession.

- 7 of the 10 most-recent AIA Architecture Firm Award recipients are a 2030 signatory.
- Since 2014, every firm to receive a COTE® Top Ten Award has become a 2030 signatory.
- In 2018, more than 70% of AIA award-winning projects were designed by one or more 2030 signatory firm.

< **Atrium/forum at Keller Center, a 2020 COTE® Top Ten recipient.**

ARCHITECT Farr Associates
PHOTO © Tom Rossiter

1

Sign the Commitment letter

2

Create a Sustainability Action Plan

3

Endeavor to meet 2030 targets

4

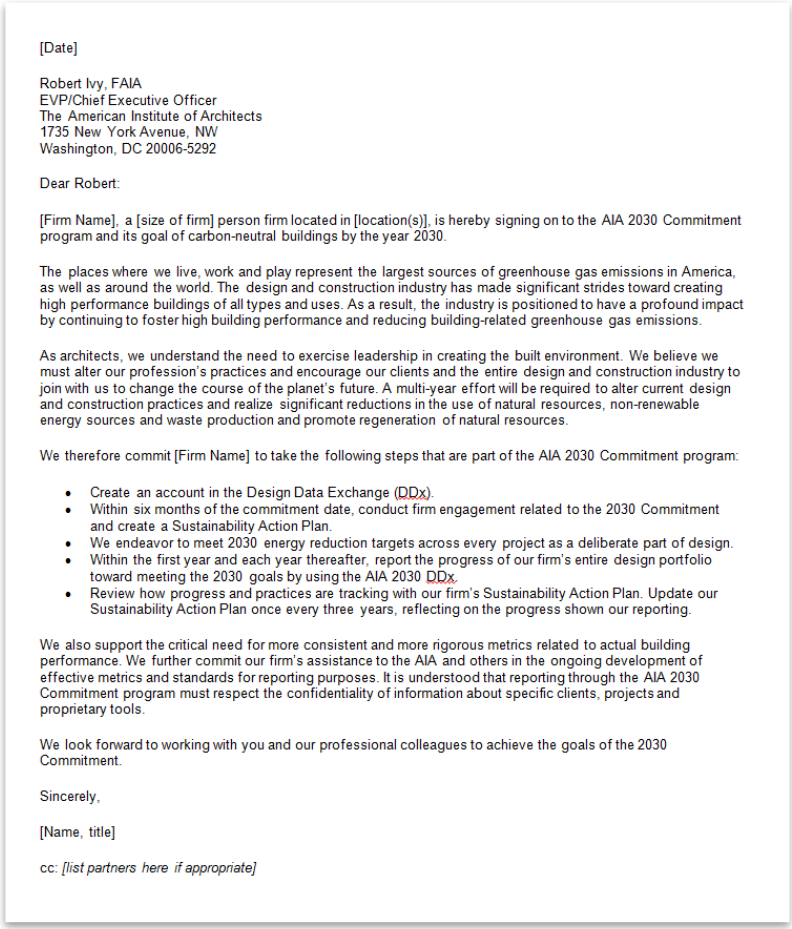
Report all projects in the DDx

5

Review and update your Sustainability Action Plan

1 SIGN THE LETTER — 2 CREATE AN SAP — 3 ENDEAVOR TO MEET TARGETS — 4 REPORT PROJECTS — 5 UPDATE SAP

- **Create a DDx account** (https://2030ddx.aia.org/)
- **Draft a Letter of Commitment signed by firm leadership.** A template letter is available here.
- **Upload Letter of Commitment to the DDx**



[Date]

Robert Ivy, FAIA
EVP/Chief Executive Officer
The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

Dear Robert:

[Firm Name], a [size of firm] person firm located in [location(s)], is hereby signing on to the AIA 2030 Commitment program and its goal of carbon-neutral buildings by the year 2030.

The places where we live, work and play represent the largest sources of greenhouse gas emissions in America, as well as around the world. The design and construction industry has made significant strides toward creating high performance buildings of all types and uses. As a result, the industry is positioned to have a profound impact by continuing to foster high building performance and reducing building-related greenhouse gas emissions.

As architects, we understand the need to exercise leadership in creating the built environment. We believe we must alter our profession's practices and encourage our clients and the entire design and construction industry to join with us to change the course of the planet's future. A multi-year effort will be required to alter current design and construction practices and realize significant reductions in the use of natural resources, non-renewable energy sources and waste production and promote regeneration of natural resources.

We therefore commit [Firm Name] to take the following steps that are part of the AIA 2030 Commitment program:

- Create an account in the Design Data Exchange (DDx).
- Within six months of the commitment date, conduct firm engagement related to the 2030 Commitment and create a Sustainability Action Plan.
- We endeavor to meet 2030 energy reduction targets across every project as a deliberate part of design.
- Within the first year and each year thereafter, report the progress of our firm's entire design portfolio toward meeting the 2030 goals by using the AIA 2030 DDx.
- Review how progress and practices are tracking with our firm's Sustainability Action Plan. Update our Sustainability Action Plan once every three years, reflecting on the progress shown our reporting.

We also support the critical need for more consistent and more rigorous metrics related to actual building performance. We further commit our firm's assistance to the AIA and others in the ongoing development of effective metrics and standards for reporting purposes. It is understood that reporting through the AIA 2030 Commitment program must respect the confidentiality of information about specific clients, projects and proprietary tools.

We look forward to working with you and our professional colleagues to achieve the goals of the 2030 Commitment.

Sincerely,

[Name, title]

cc: *[list partners here if appropriate]*

1 SIGN THE LETTER — 2 CREATE AN SAP — 3 ENDEAVOR TO MEET TARGETS — 4 REPORT PROJECTS — 5 UPDATE SAP

- **Upload a Sustainability Action Plan (SAPs) to DDx within first 6-months.**

SAPs document a firm's approach to sustainable design and should address:

- Firm commitment
- Design & approach
- Evaluation & reporting
- Outreach & advocacy
- Training and education
- Operations & outlook

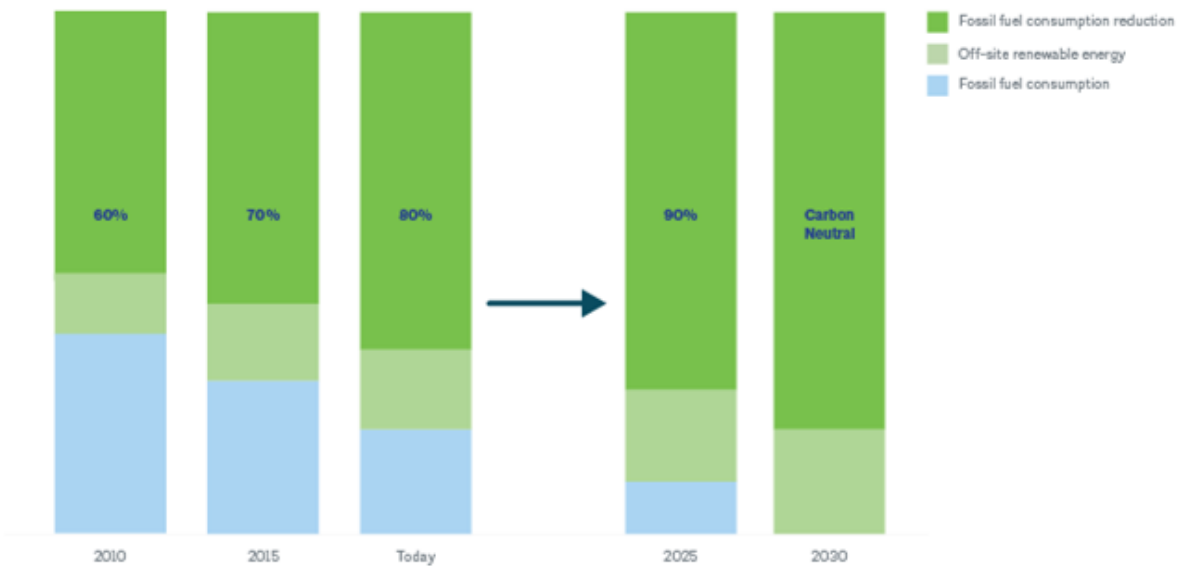
Examples can be found here.

1 SIGN THE LETTER — 2 CREATE AN SAP — 3 ENDEAVOR TO MEET TARGETS — 4 REPORT PROJECTS — 5 UPDATE SAP

- **Endeavor to design all projects to meet current reduction targets:**

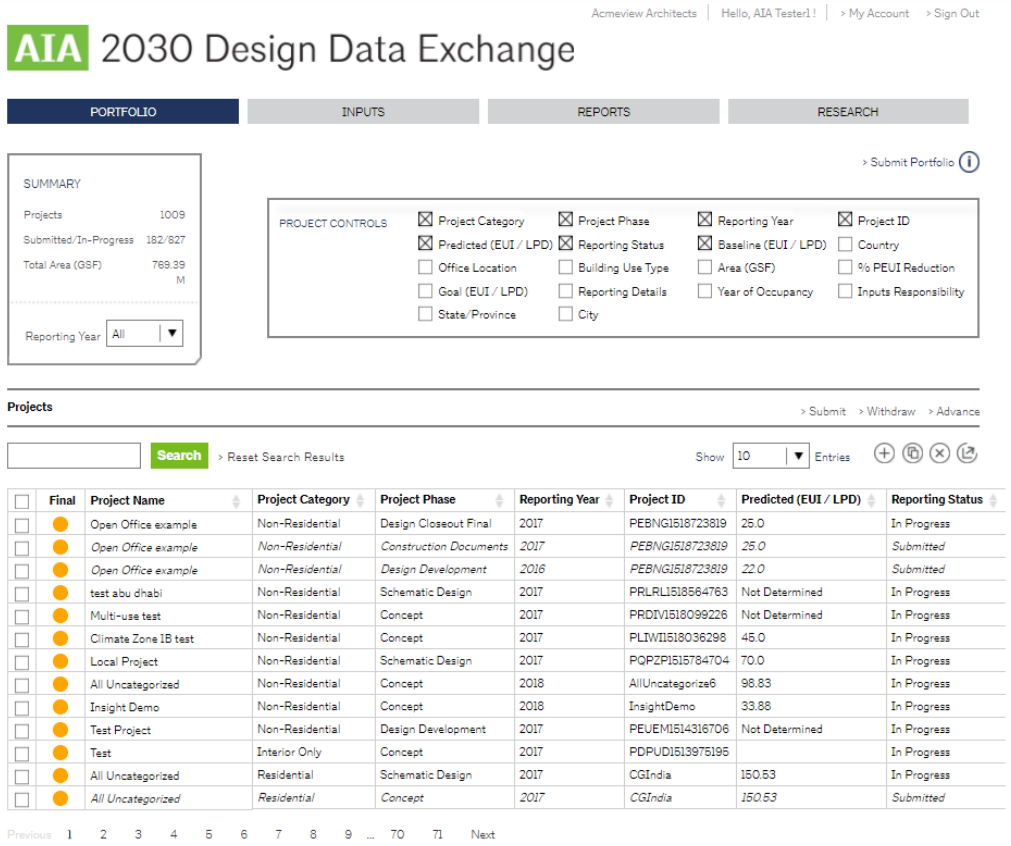
80% pEUI reduction from the baseline energy performance for whole-building projects

25% pLPD reduction from baseline for interiors projects.



1 SIGN THE LETTER — 2 CREATE AN SAP — 3 ENDEAVOR TO MEET TARGETS — 4 REPORT PROJECTS — 5 UPDATE SAP

- **The annual reporting deadline is March 31st.**
- **Report all projects in an active design phase during the reporting year.**
- **In joint-venture projects, both firms may report the project.**
- **Only report interior projects with lighting scope.**



1 SIGN THE LETTER

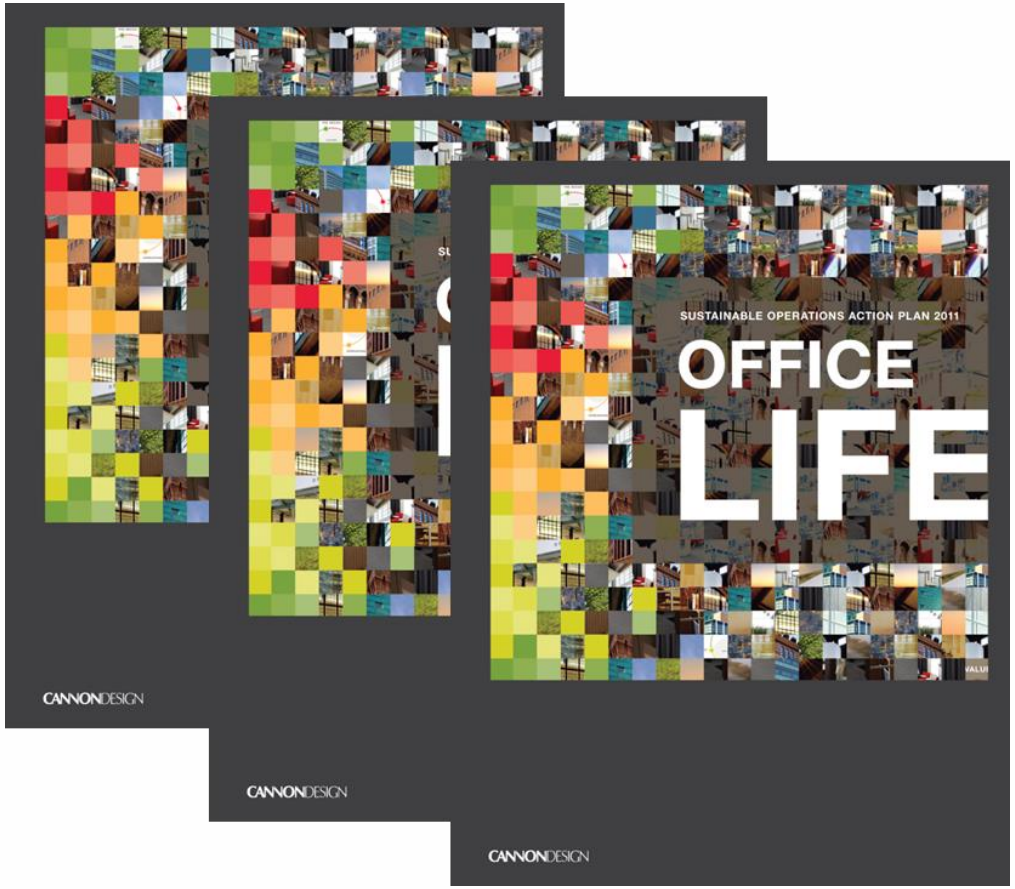
2 CREATE AN SAP

3 ENDEAVOR TO MEET TARGETS

4 REPORT PROJECTS

5 UPDATE SAP

- **Update your Sustainability Action Plan every three years.**

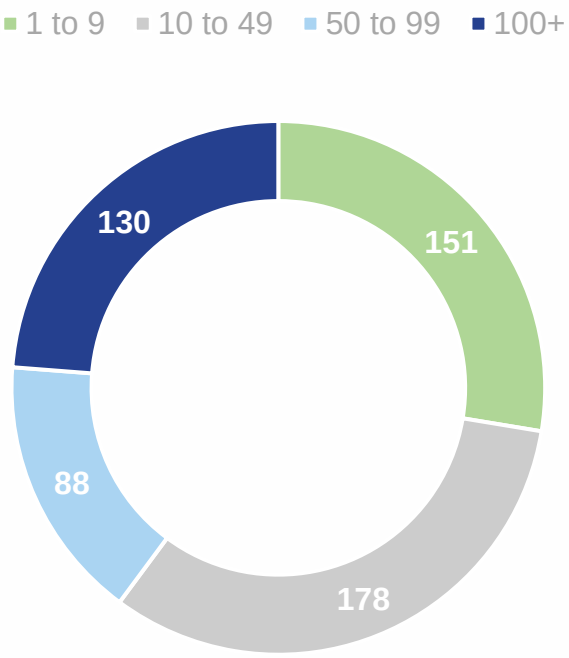


2030 Signatories

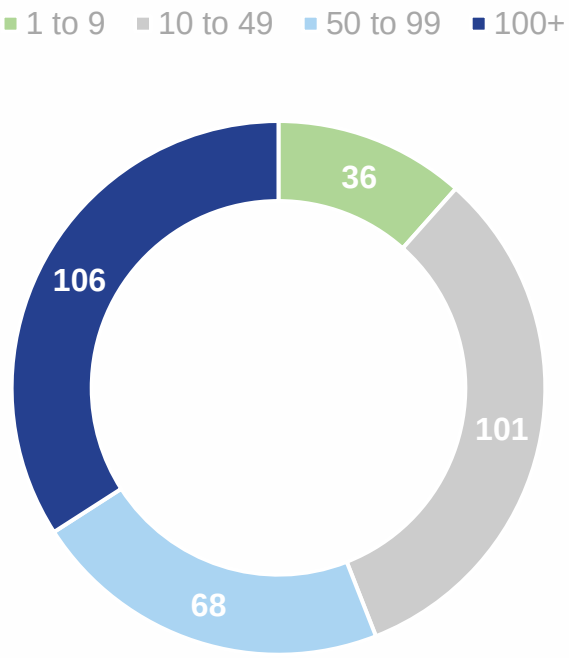
and their impact

Over 760 firms are already 2030 signatories

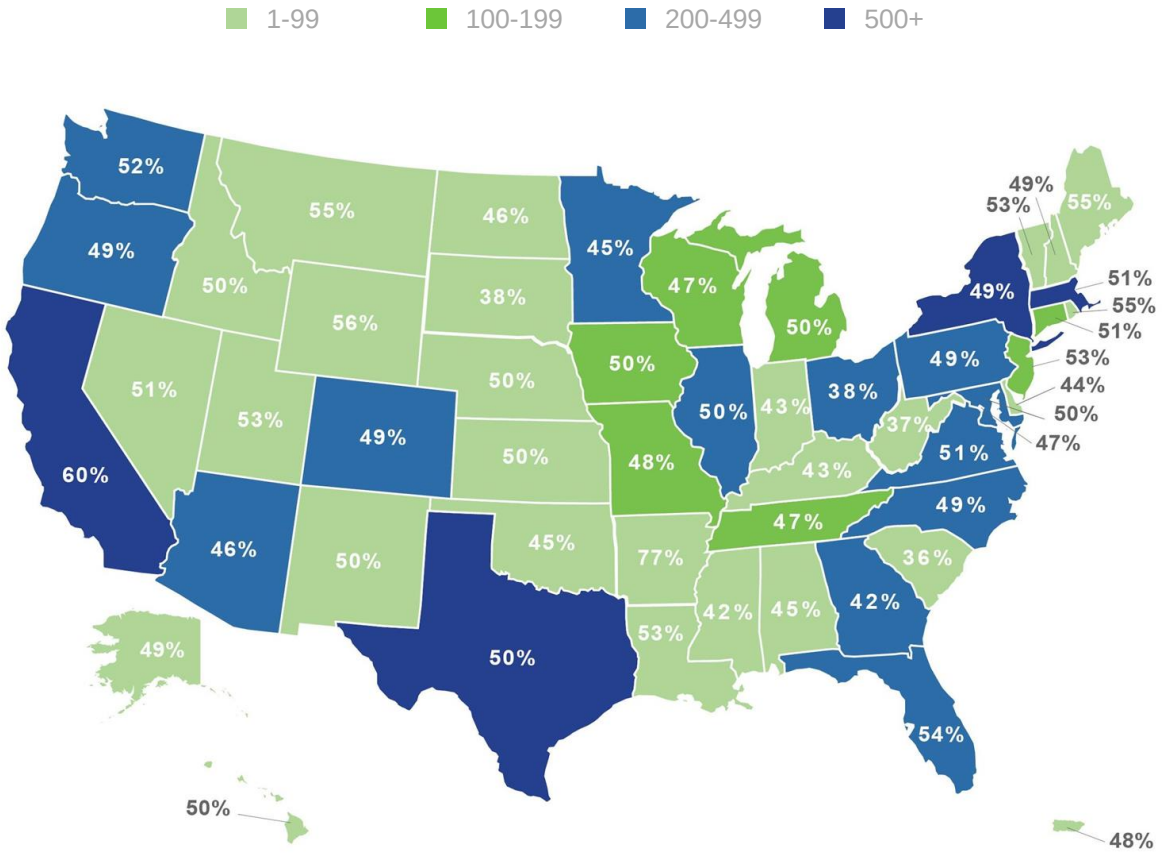
Count of active signatories who joined before 2019, by size

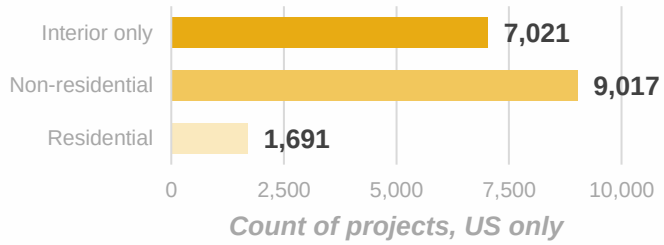


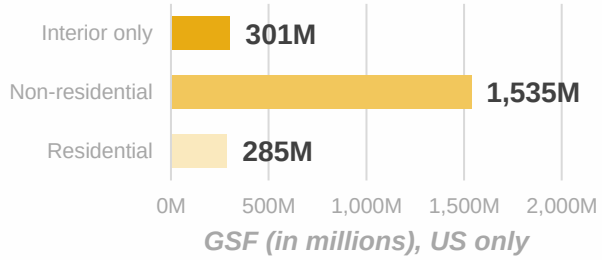
Count of companies who submitted a 2019 portfolio by size



In 2019, 2030 signatories reported 17,708 projects—totaling 2.1 billion sq ft—from every US state, the District of Columbia, and Puerto Rico.

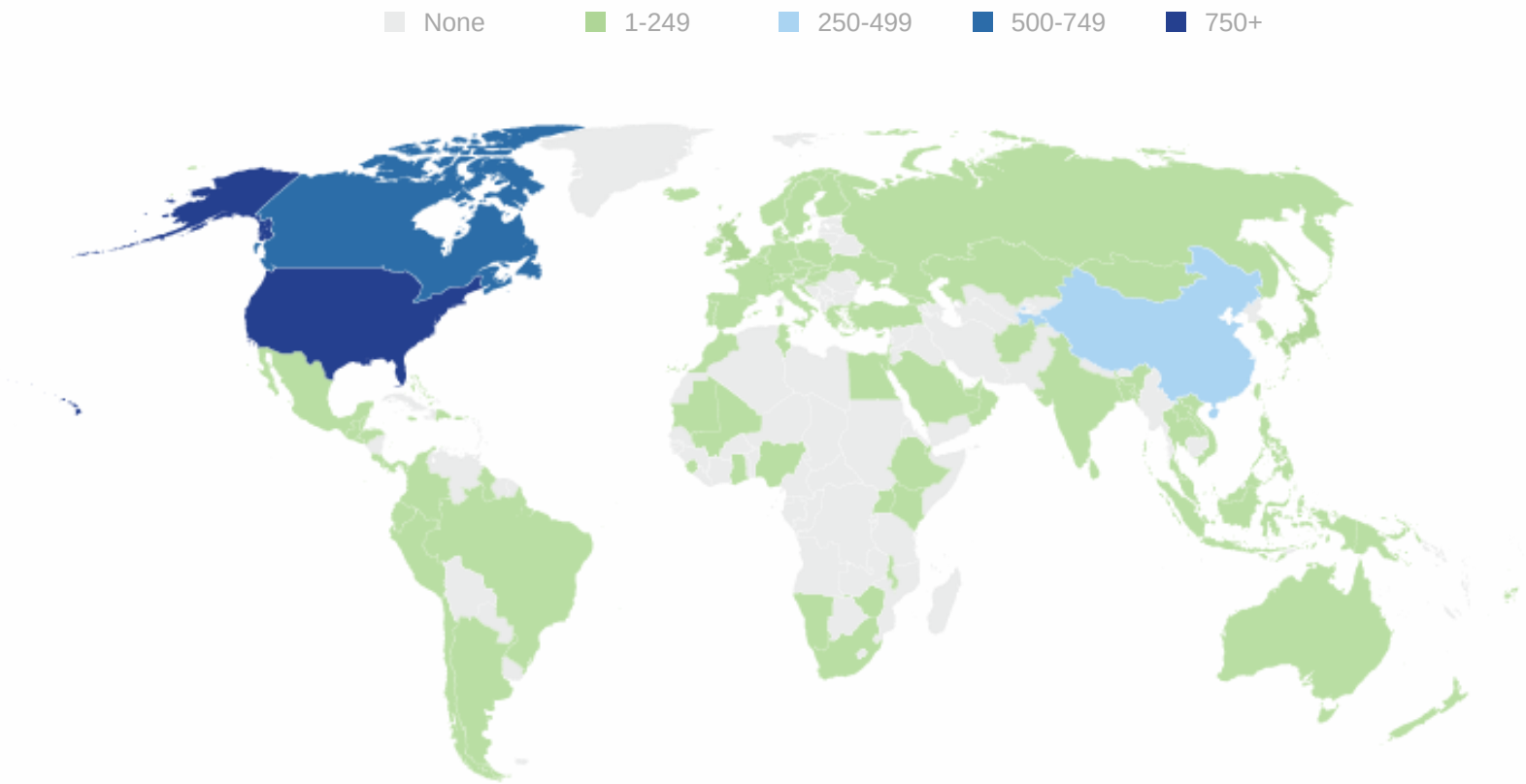


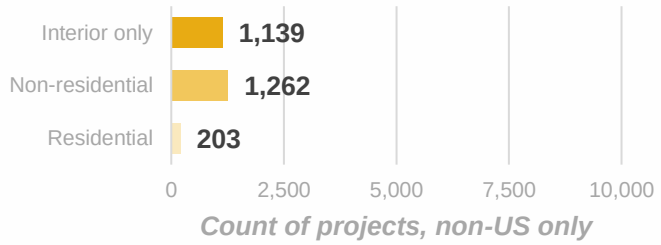


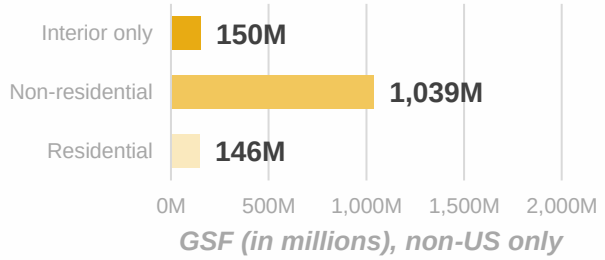


The impact of the 2030 Commitment extends beyond the US.

In 2019, 2,602 projects totaling more than 1.3 billion sq ft were reported outside the US.

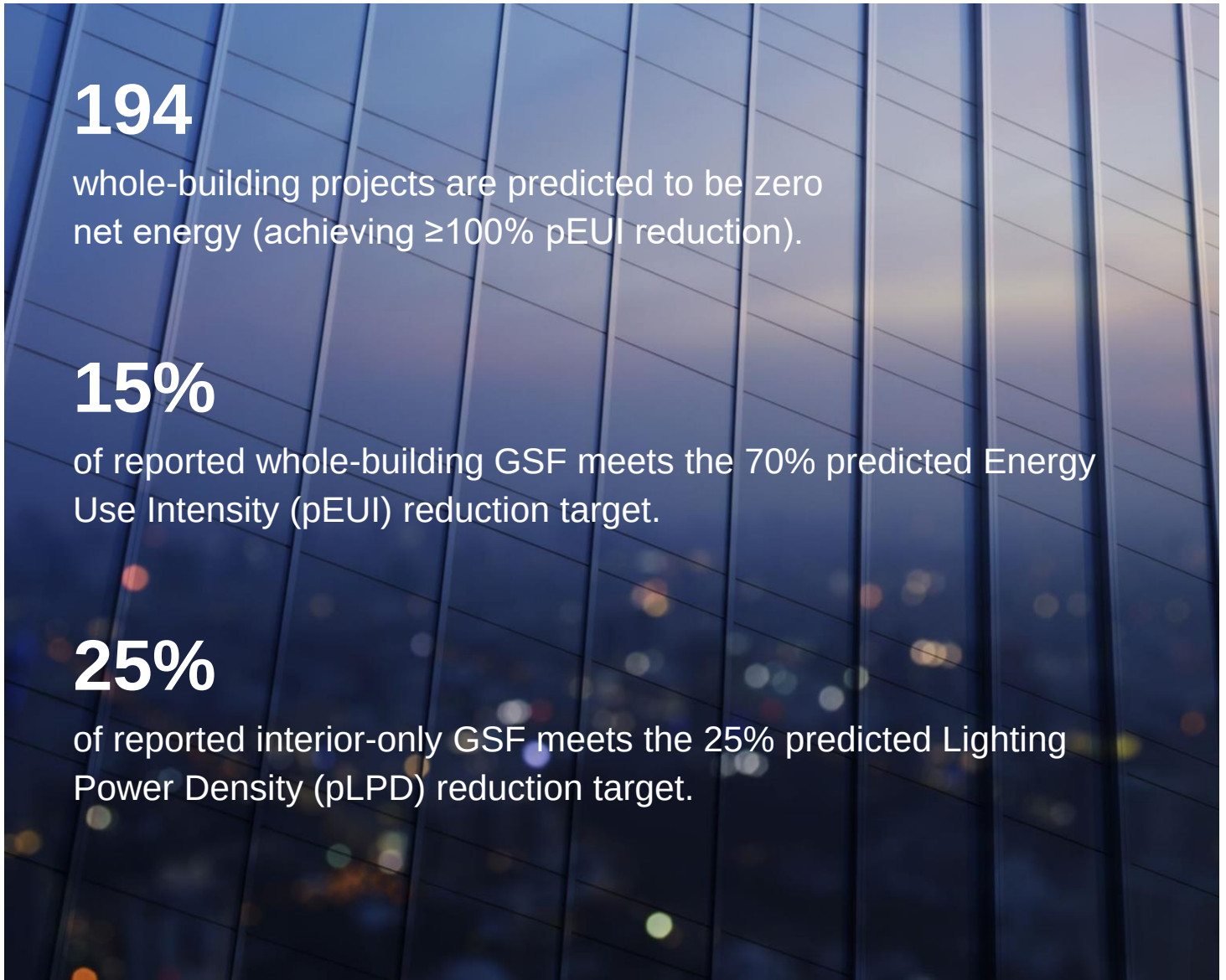






In 2019, 2030 Commitment projects predicted an annual overall energy savings equivalent to avoiding 20.2 million MT CO2e.

That's the same as removing 4.4 million cars from the road for one year.



194

whole-building projects are predicted to be zero net energy (achieving ≥100% pEUI reduction).

15%

of reported whole-building GSF meets the 70% predicted Energy Use Intensity (pEUI) reduction target.

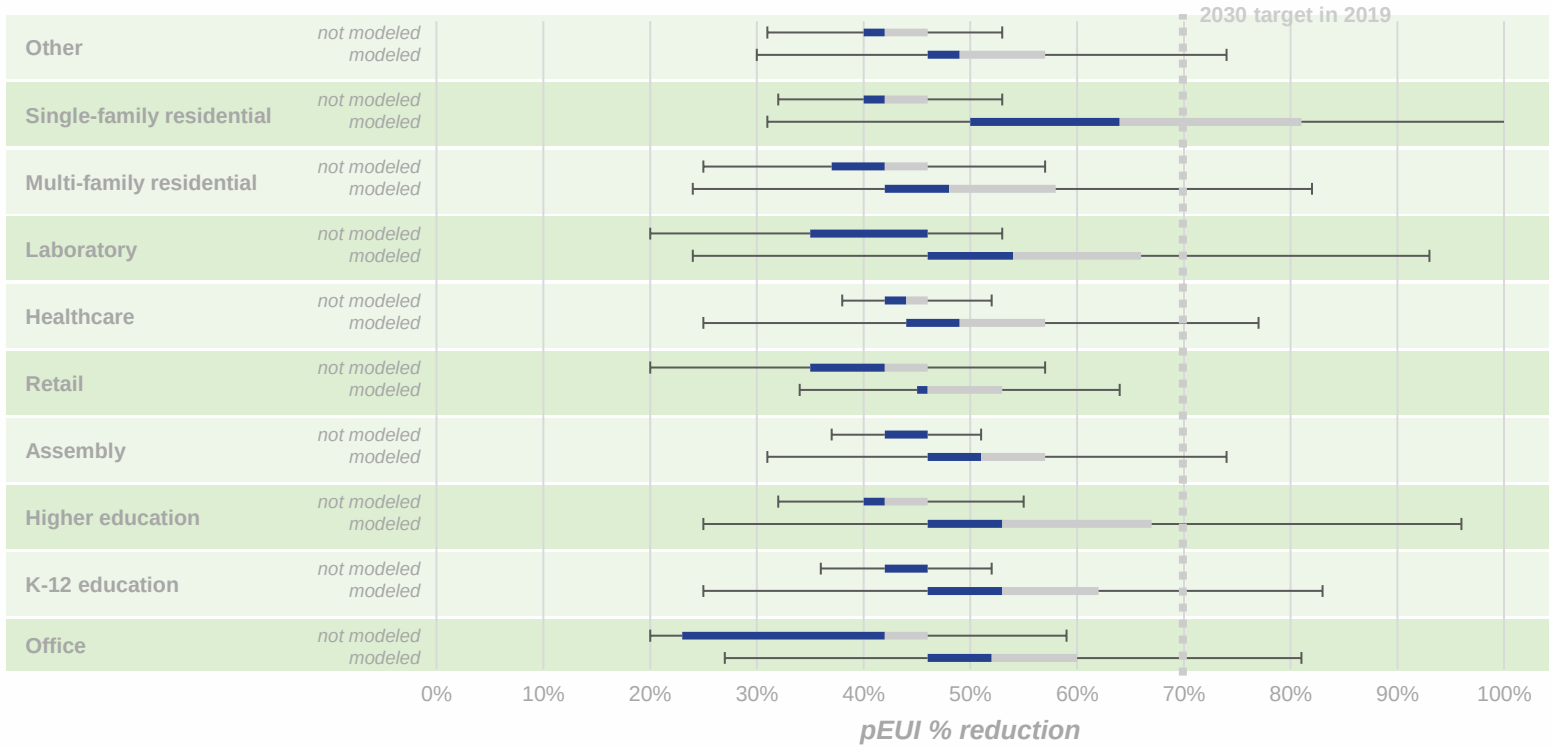
25%

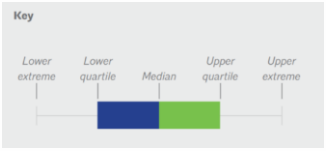
of reported interior-only GSF meets the 25% predicted Lighting Power Density (pLPD) reduction target.

CHART 5.4

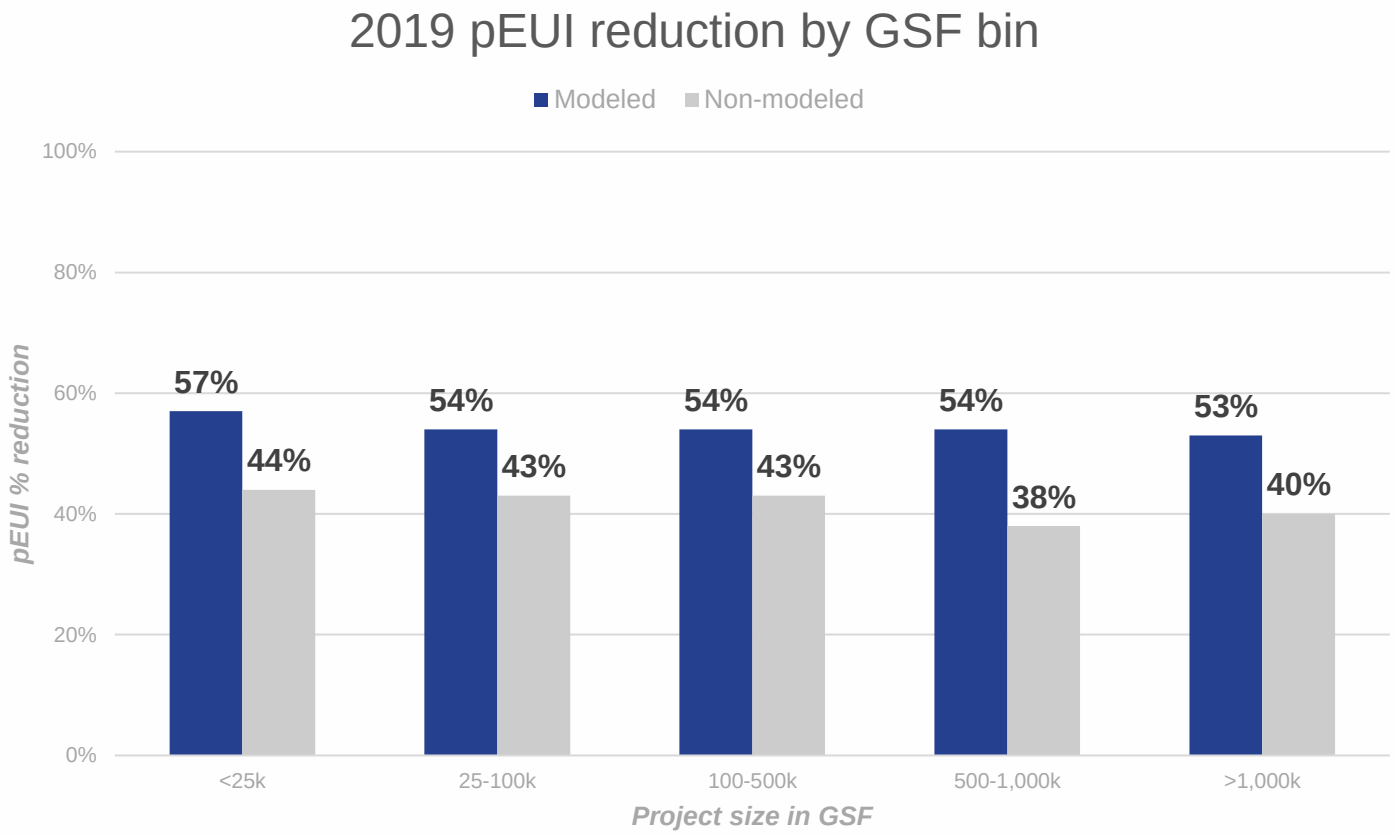
In 2018, projects in every use type demonstrated an ability to meet the 80% pEUI reduction target.

Energy modeling is even more important as the target increases to 80% in 2020.





Modeled projects consistently report higher savings, regardless of size.



In 2018, 2030 projects represented energy savings of more than $4.1 billion over the baseline equivalent.

COMMERCIAL SAVINGS

A typical 100,000-square-foot commercial office building in New York City designed to perform 70% better than the 2030 baseline would yield the following annual savings:

~2,154 MWh
less energy

~$199,600
in projected energy cost savings

~520
metric tons CO_2e reduction

RESIDENTIAL SAVINGS

Meanwhile, a typical 2,500-square-foot single-family home in Mobile, Alabama, designed to perform 70% better than the 2030 baseline would yield the following annual savings:

~22.6 MWh
less energy

~$2,050
in projected energy cost savings

~9
metric tons CO_2e reduction

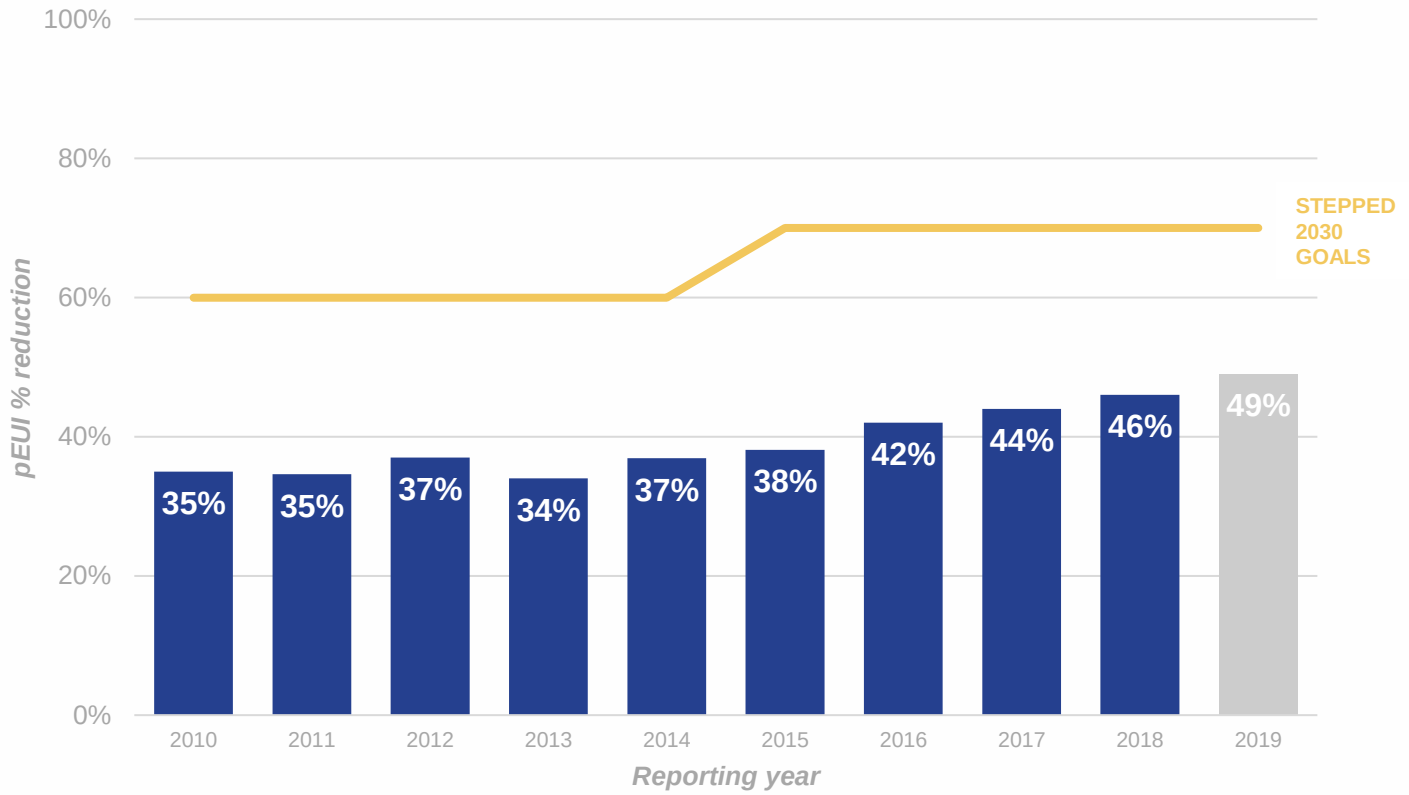
RB+B Architects, a small firm in Fort Collins, CO, makes the case that pushing toward zero net carbon is good for clients whether they're motivated by environmental impacts or long-term operating costs.

"We can give you a high-performing school that will save operating dollars. We can compare to similar buildings from the same time frames, showing annual savings of hundreds of thousands of dollars—which can be translated into a teacher's salary or some other need."

- Matt Arabasz, AIA, Principal RB+B

Our progress is not keeping pace with the growing urgency and impacts of climate change.

Along with continued incorporation of proven energy-efficient design strategies, we also need to increase our use of energy modeling and incorporate on- and off-site renewable energy to reach these targets.

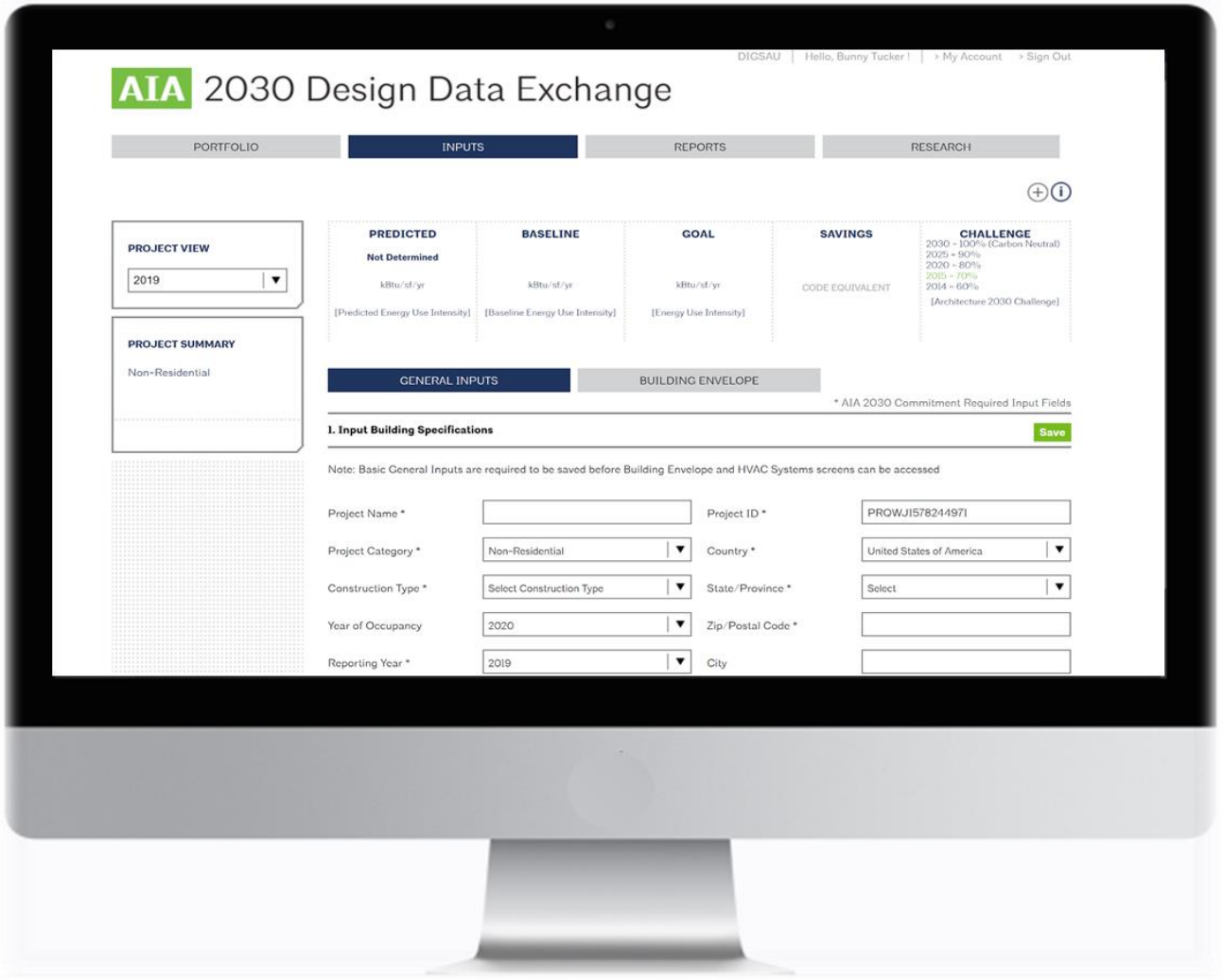


2030 Commitment in practice

Getting to zero

with the Design Data Exchange (DDx)

The Design Data Exchange (DDx) is a cloud-based, confidential reporting tool created by AIA that allows you to compare projects by type, size, climate, and other attributes across the 2030 portfolio.



Direct input

- Great for smaller firms or portfolios
- High degree of control over data
- Easily manage team permissions

Bulk upload

- Great for firms with an in-house database
- Inputs limited to core fields
- Quickly upload hundreds of projects

Via energy modeling software

- Great for firms who regularly model projects
- Connects with six software providers

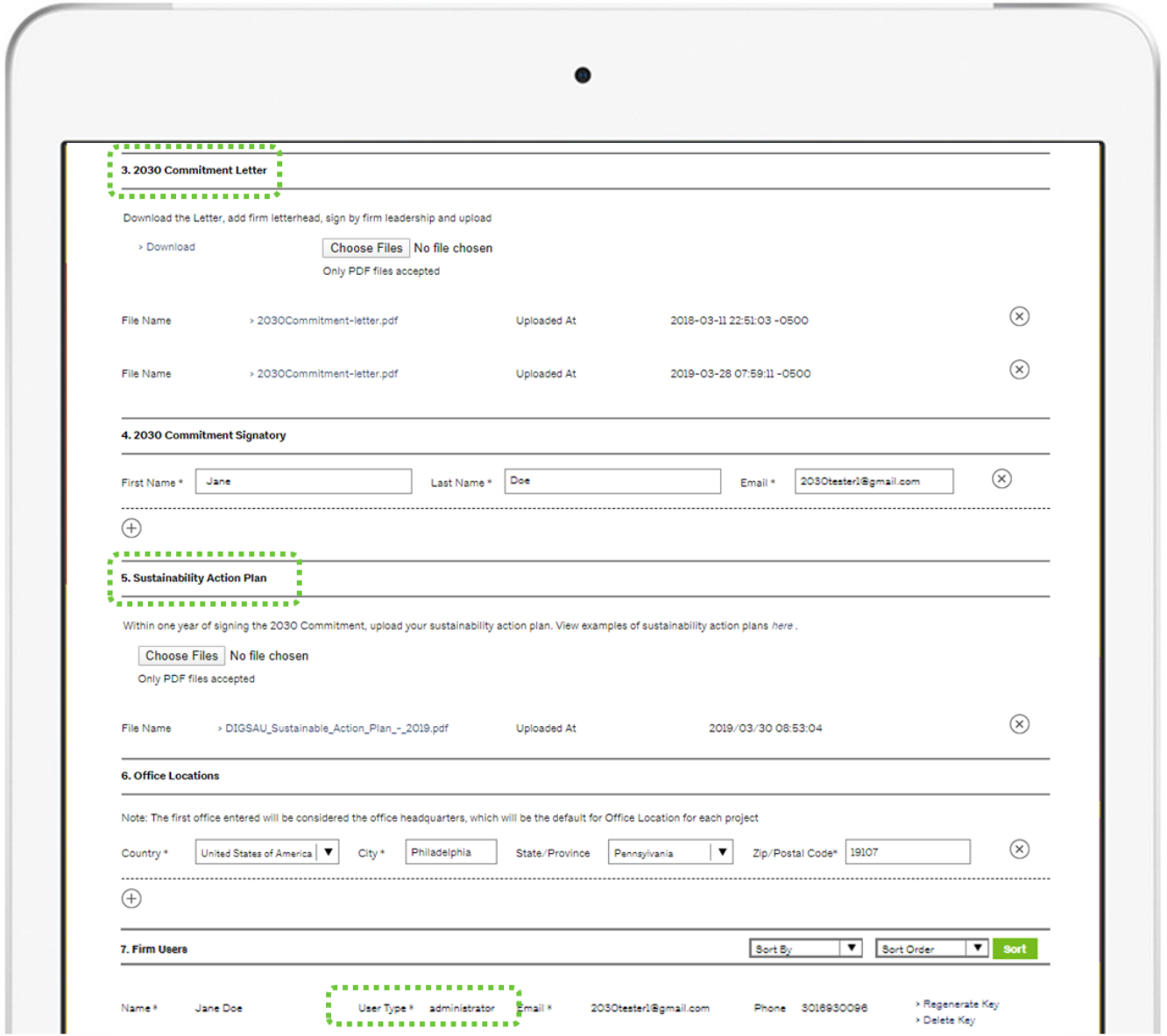
Entering data

There are three ways to enter data in the DDx: direct entry, bulk import, and via energy modeling software. No matter how you enter the required fields are the same.

- **Section 1.** Define basic information about your project, including location and use type.
- **Section 2.** Document if residential and non-residential projects have been energy modeled and relevant energy code. Skip for interiors only projects.
- **Section 3.** Establish a baseline, target, and record your pEUI or pLPD.
- **Section 4.** Track additional data about your project, including embodied carbon and renewables!

Joining the 2030 Commitment gives you access to the DDx (https://2030ddx.aia.org/)

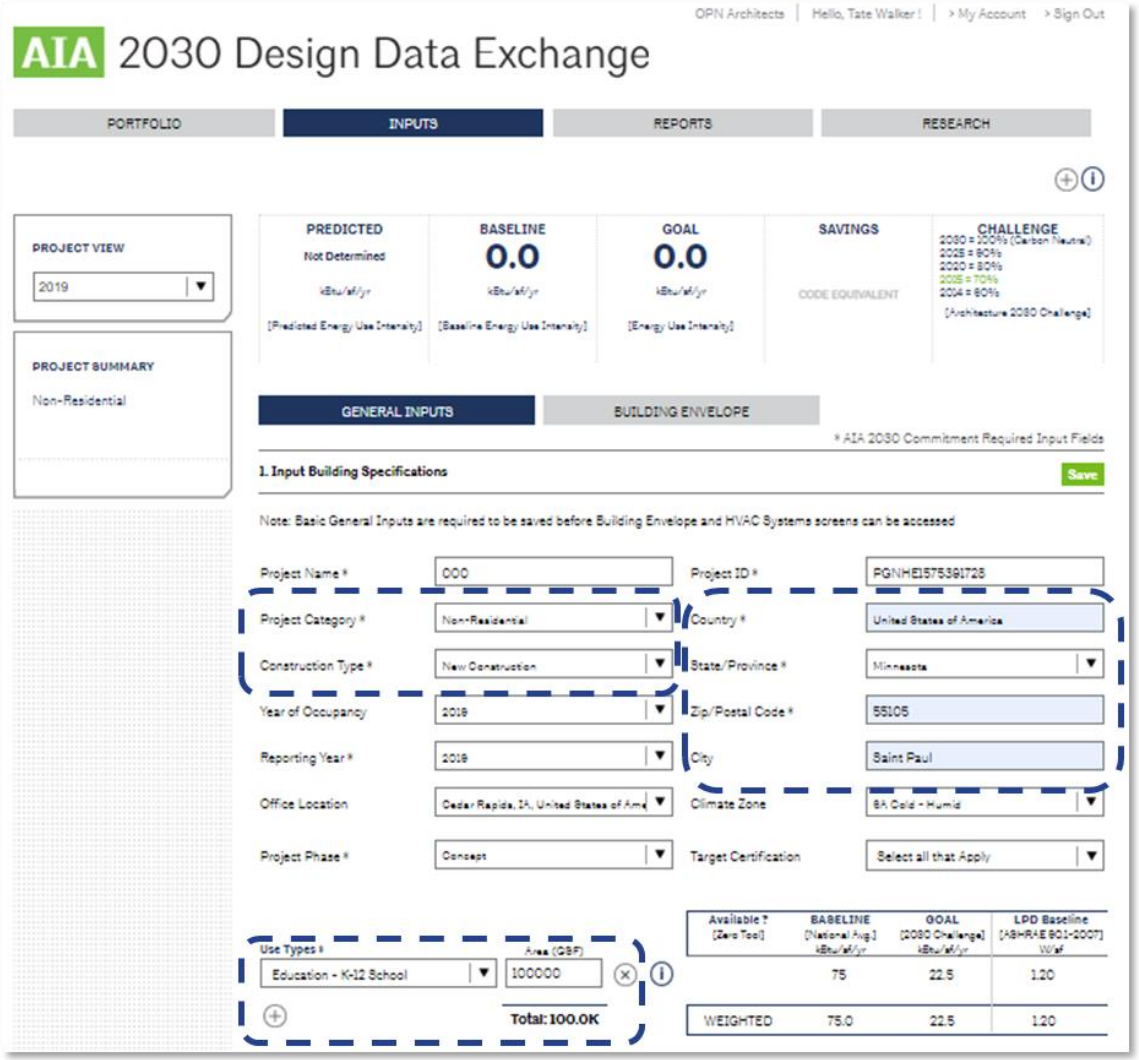
- Use the DDx to submit firm and project data
  - 2030 Commitment letter
  - Sustainability Action Plan
  - Project data
- Add users and set permissions
  - Administrators
  - Users
  - Viewers



SECTION 1: Input Building Specifications

Setup your basic project with these three inputs:

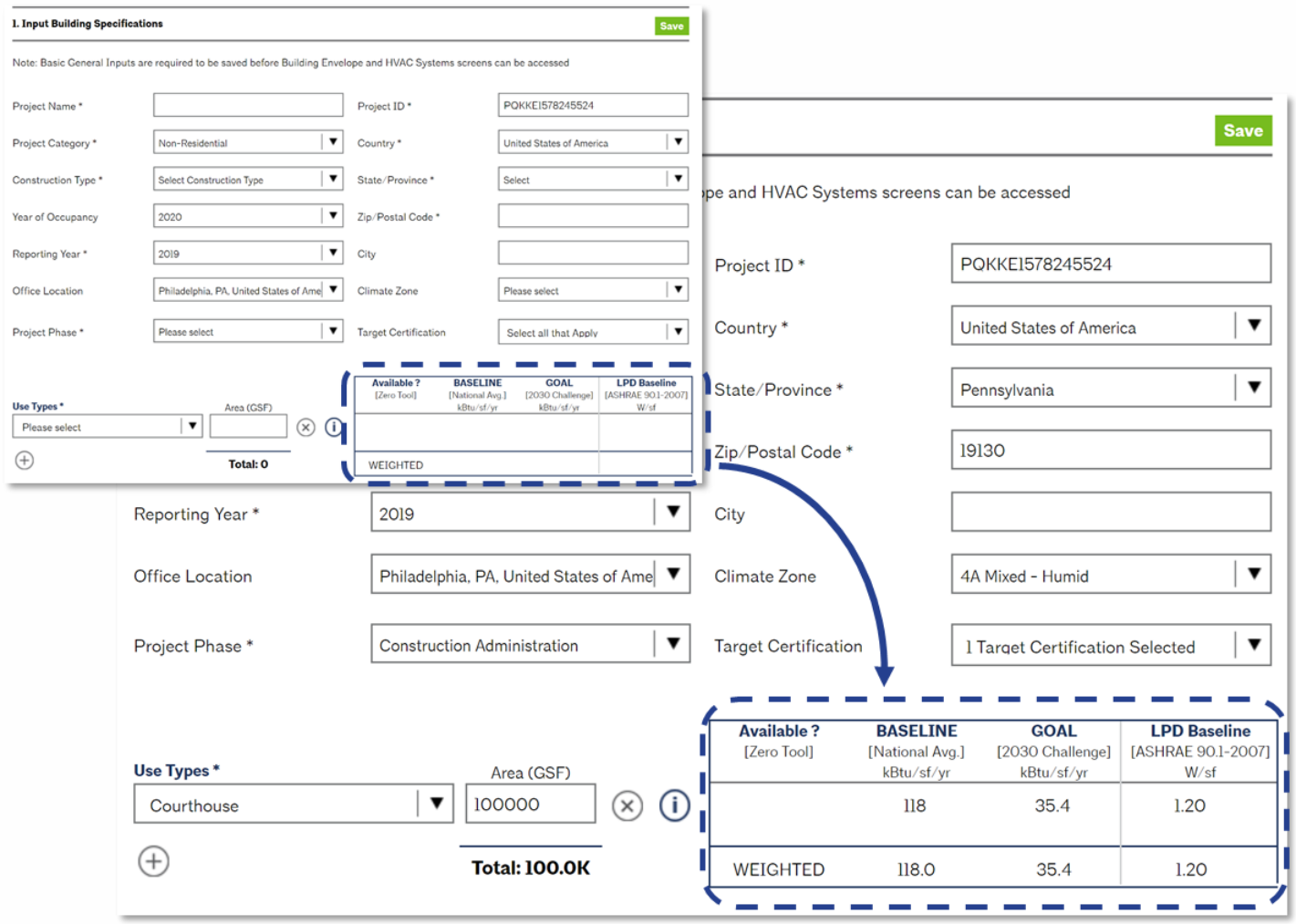
1. **Building type**
   - Project category
   - Construction type
   - Use type (>30 options!)
2. **Size**
   - GSF area (by use type)
3. **Location**
   - Country
   - State
   - Zip



SECTION 1: Input Building Specifications

Climate Zone is automatically populated from location inputs.

Baseline and Goal are automatically populated using national average data (2003 CBECS).



SECTION 1: Input Building Specifications

The project category you select changes the inputs available in subsequent sections.

Residential + non-residential projects

- Predicted Energy Use Intensity (pEUI) is used to describe the project's energy performance
- Each use type has an associated Energy Use Intensity (EUI) based on the national average for that use type.
- The 2030 Commitment uses the 2003 CBECS database to define the national average.
- EUI is defined as energy/area, measured in kBtu/sf/yr

Interiors projects

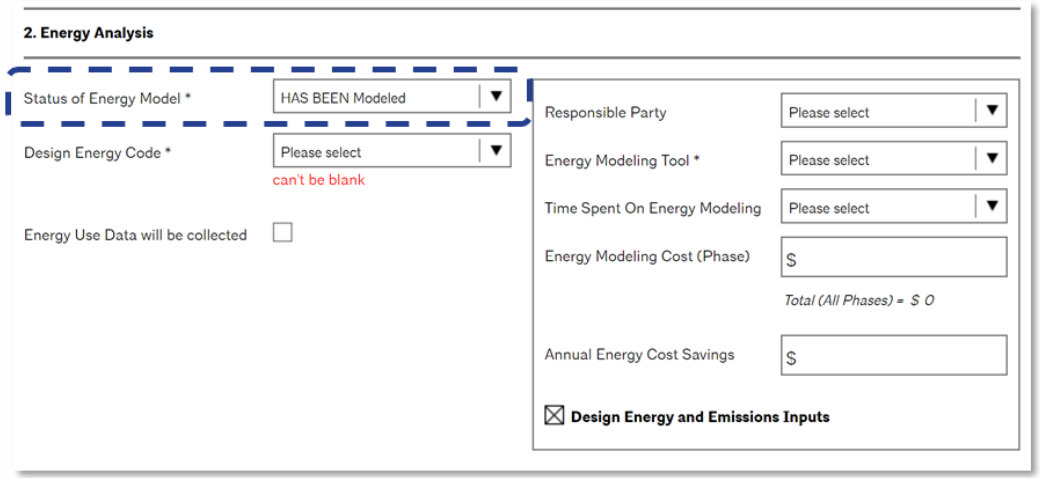
- Lighting power density (LPD) is used to describe the project's energy performance
- Each use type has an Lighting Power Density (LPD) baseline.
- The 2030 Commitment uses ASHRAE 90.12007 to define the LPD baseline for each use type.
- LPD is defined as lighting power to be installed/area, measured in watts/sf

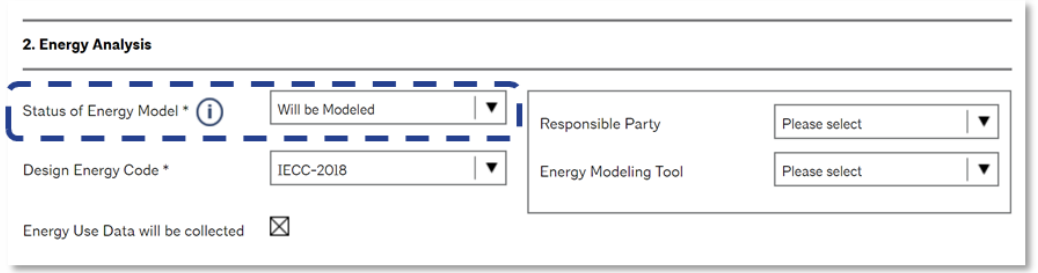
SECTION 2: Energy analysis

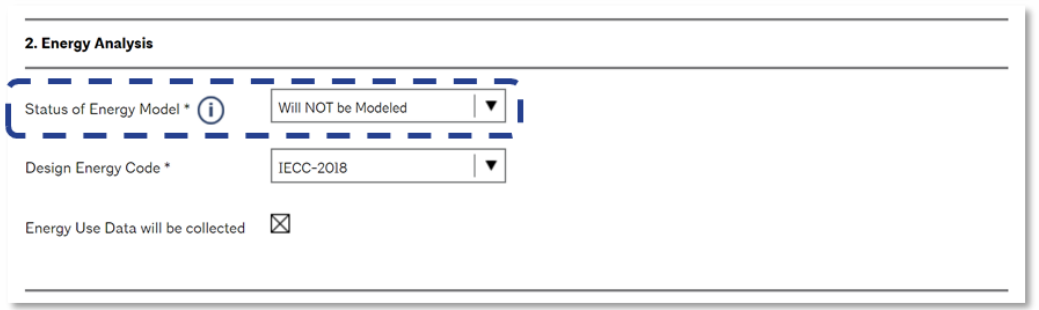
Residential and non-residential

For residential and non-residential projects, indicate whether the project has an energy model, will have an energy model, or will not be modeled

Pick the relevant energy code for the project.







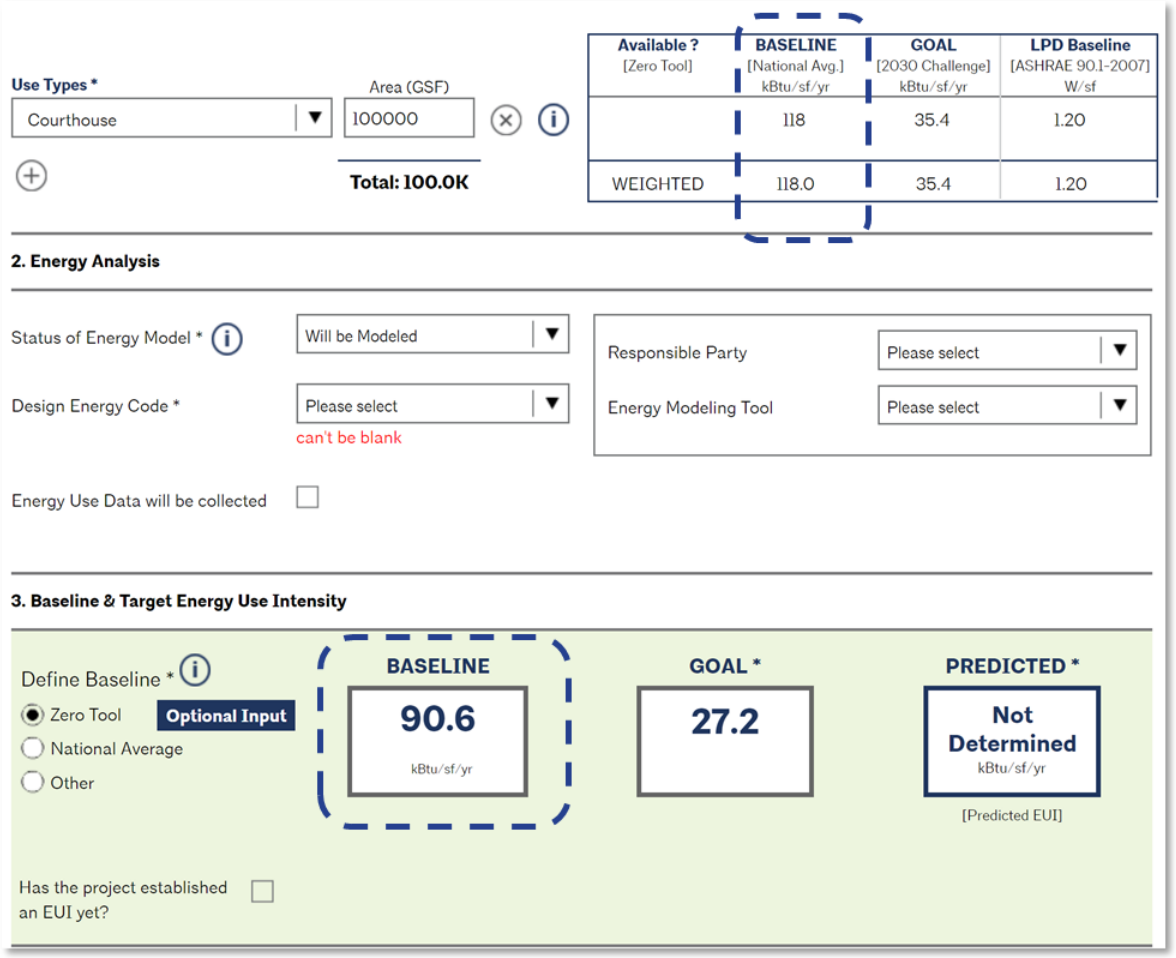
SECTION 3: Baseline & Target Energy Use Intensity

Residential and non-residential

Choose “Zero Tool” to adjust baseline to regional data

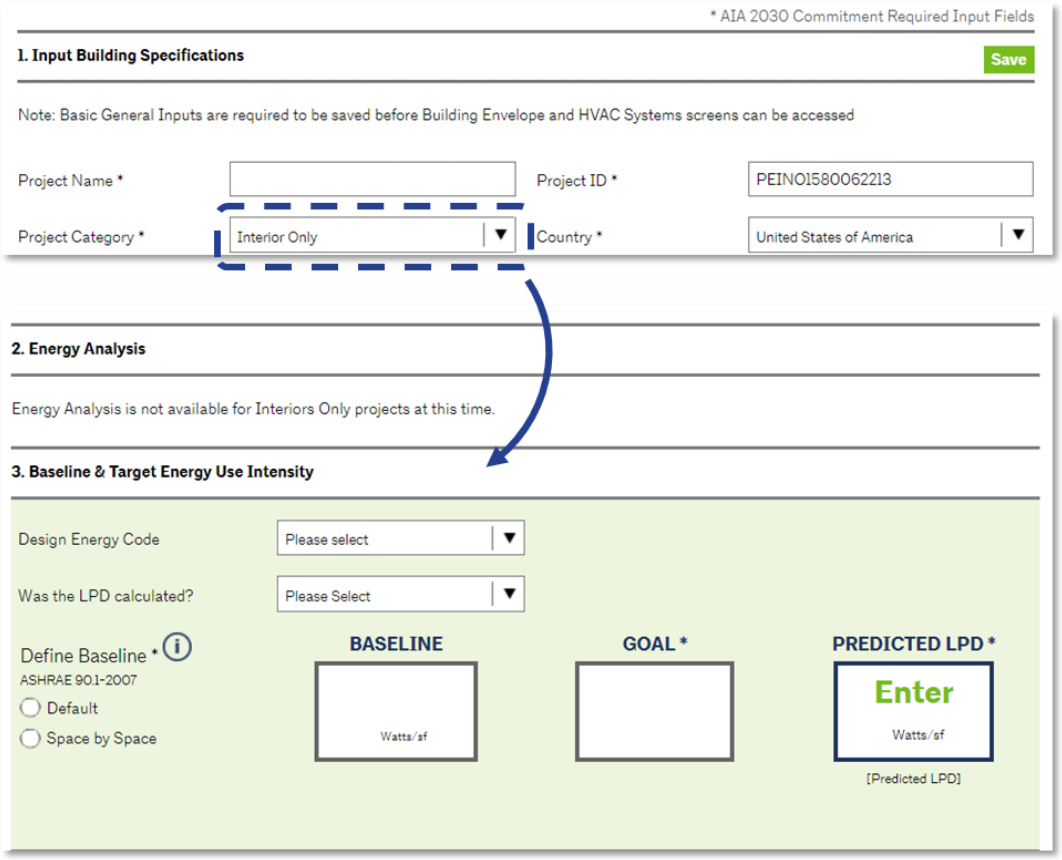
Baseline and Goal are automatically populated in Section 3

“Other” may be used for unique applications (process loads, purchased utilities) or unique project types (campus, hotel, multifamily, industrial, labs)



SECTION 3: Baseline & Target Energy Use Intensity

Interior only



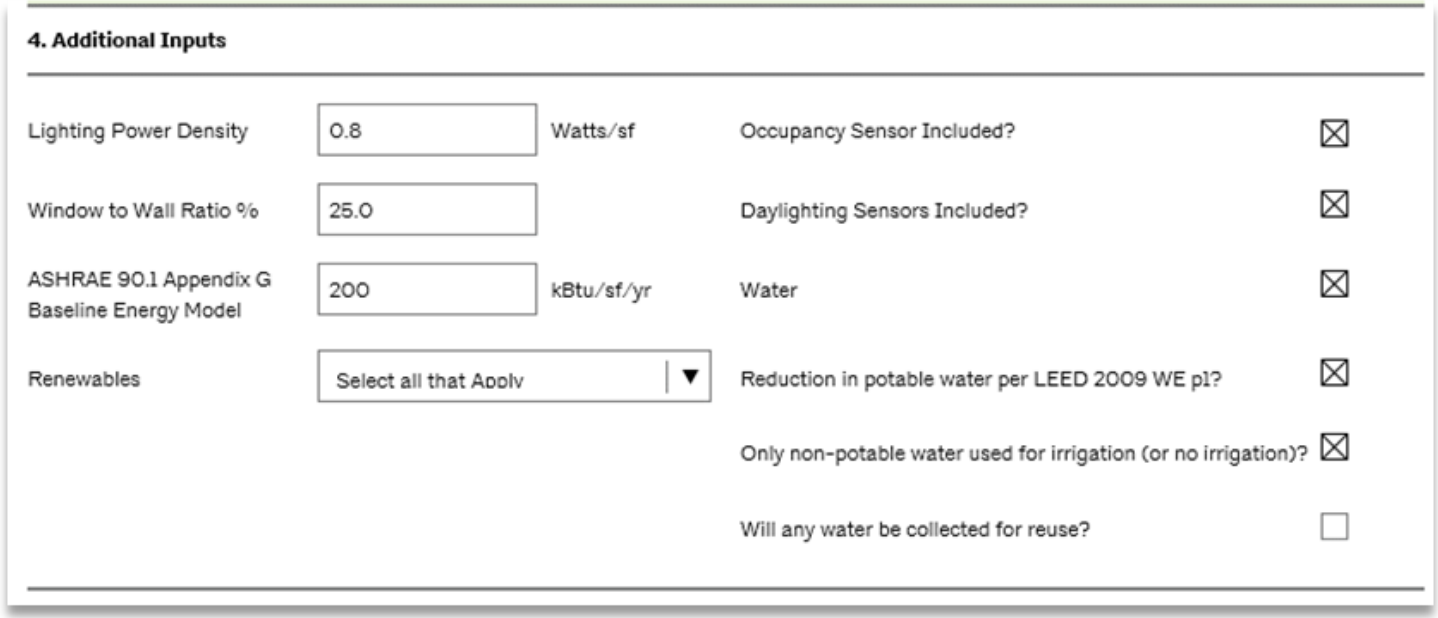
When the Project Category is "Interior Only" the inputs for "Section 3: Baseline & Target Energy Use Intensity" change.

- **Design Energy Code:** select relevant energy code from drop down menu
- **Was the LPD calculated?** select yes or no
- **Define Baseline**
  - Default (Building Area Method as defined by ASHRAE 90.1)
  - Space by Space (Space-by-Space Method as defined by ASHRAE 90.1)
- **Goal**
  - Automatically populates from baseline
  - 25% reduction from ASHRAE 90.1-2007

SECTION 4: Additional inputs

Track additional data that's meaningful to you.

- Lighting power density
- Window to wall ratio
- ASHRAE 90.1 Appendix G Baseline Energy Model
- Renewables
- Basic embodied carbon
- Occupancy sensor
- Daylighting sensors
- Water



4. Additional Inputs

Lighting Power Density	0.8	Watts/sf	Occupancy Sensor Included?	☒
Window to Wall Ratio %	25.0		Daylighting Sensors Included?	☒
ASHRAE 90.1 Appendix G Baseline Energy Model	200	kBtu/sf/yr	Water	☒
Renewables	Select all that Apply ▼		Reduction in potable water per LEED 2009 WE p1?	☒
			Only non-potable water used for irrigation (or no irrigation)?	☒
			Will any water be collected for reuse?	☐

Tips for international projects

The default baselines for projects outside the US and Canada are derived from CBECS 2003 National Average.

For a more accurate baseline, reference EDGE Tool.

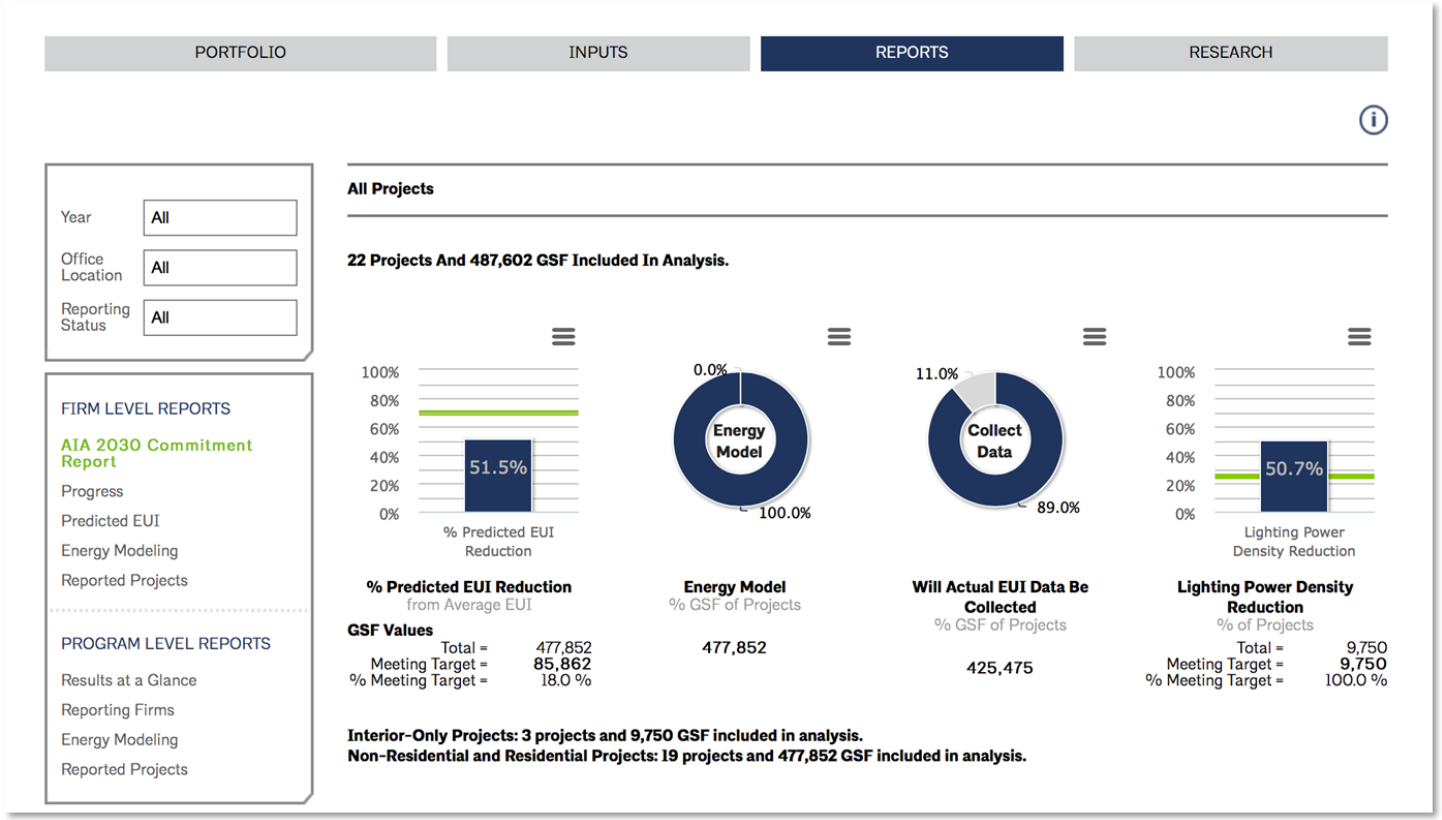
Tips for special use cases

Some use types are more challenging than others. Here are a few tips to setting meaningful baselines.

- **Parking.** DDx allows you to track Parking, but it can't be the first use type entered or the majority use type.
- **Data centers.** DDx determines data center baselines using a coefficient and your GSF. For a more accurate baseline, reference Zero Tool and log your baseline in DDx by selecting "Other."
- **Labs.** The DDx default baseline for labs is 370 kBtu/sf/yr. For a more accurate baseline, reference Laboratory Benchmarking Tool and log your baseline in DDx by selecting "Other."

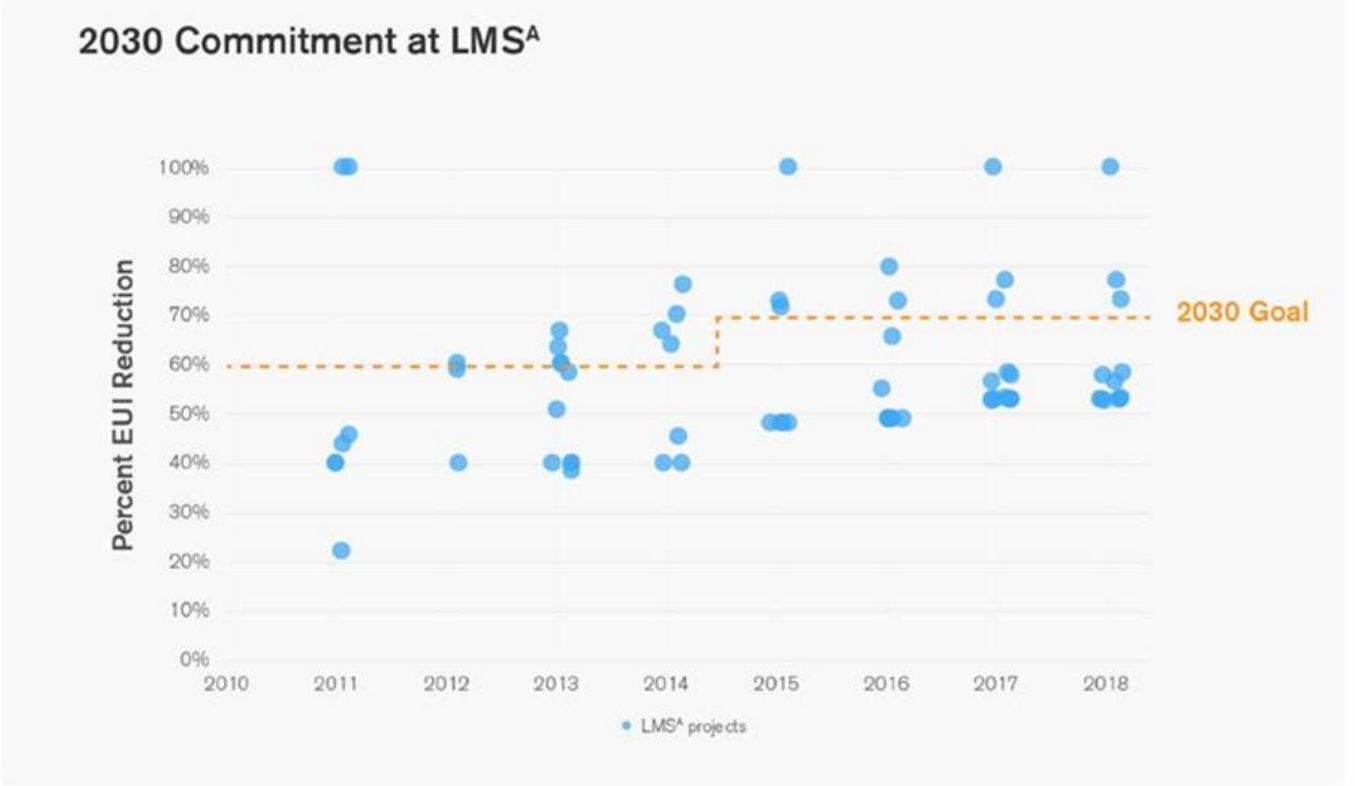
Make your data work for you

Use the reports to access quick insights into your company's performance.



Export data from DDx to create charts and graphs that help you improve your company's annual performance.

Leddy Maytum Stacy Architects, a San Francisco-based firm and AIA Firm Award recipient, publishes their year over year data.

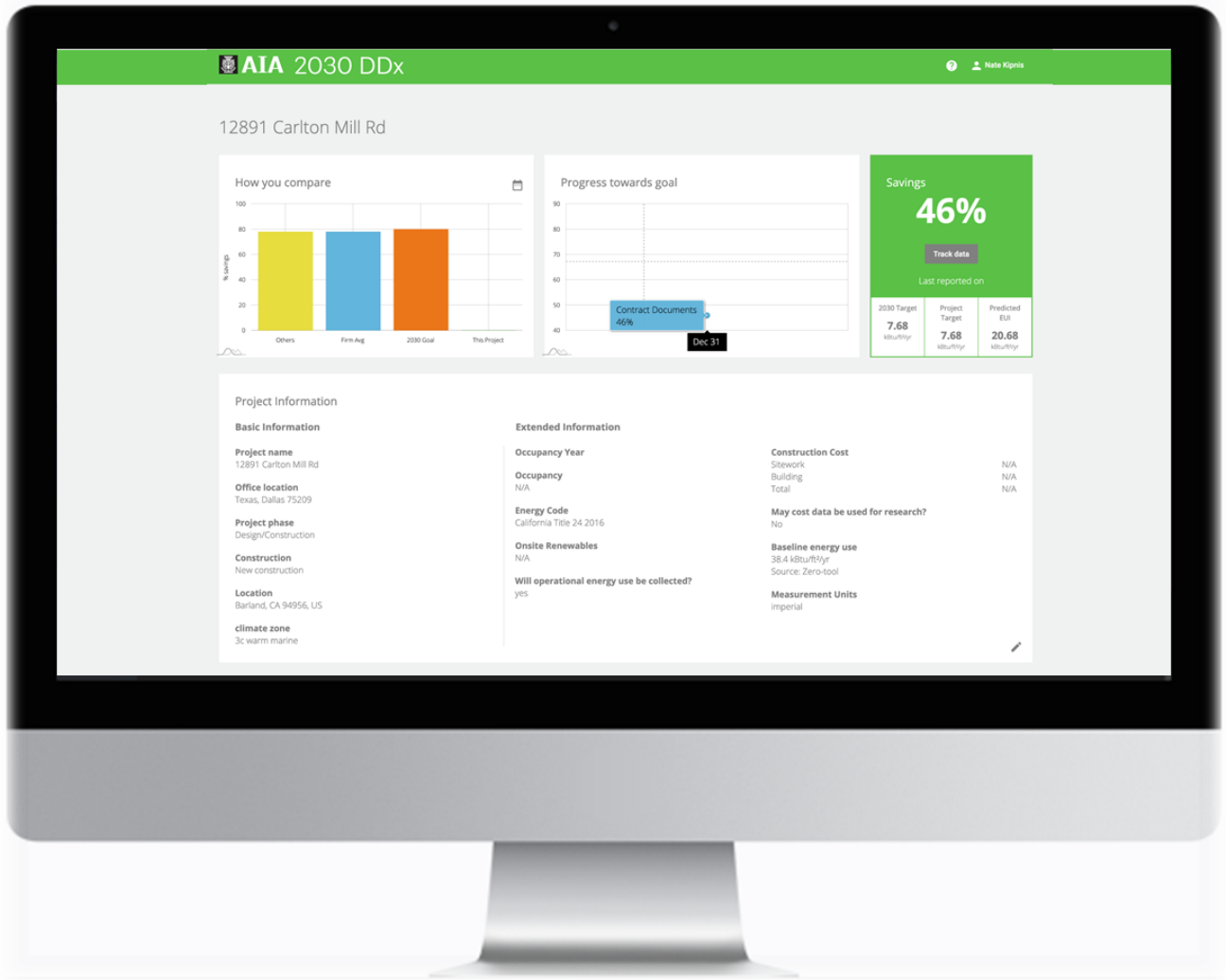


Source: "Scaling High Performance in an Era of Climate Urgency", Leddy Maytum Stacy Architects, https://www.lmsarch.com/studio/stories/research/scaling-high-performance-era-climate-urgency

Coming soon!

We’re upgrading the DDx in 2020 with a new user interface and more flexibility for teams.

Test drive the beta at beta2030ddx.aia.org



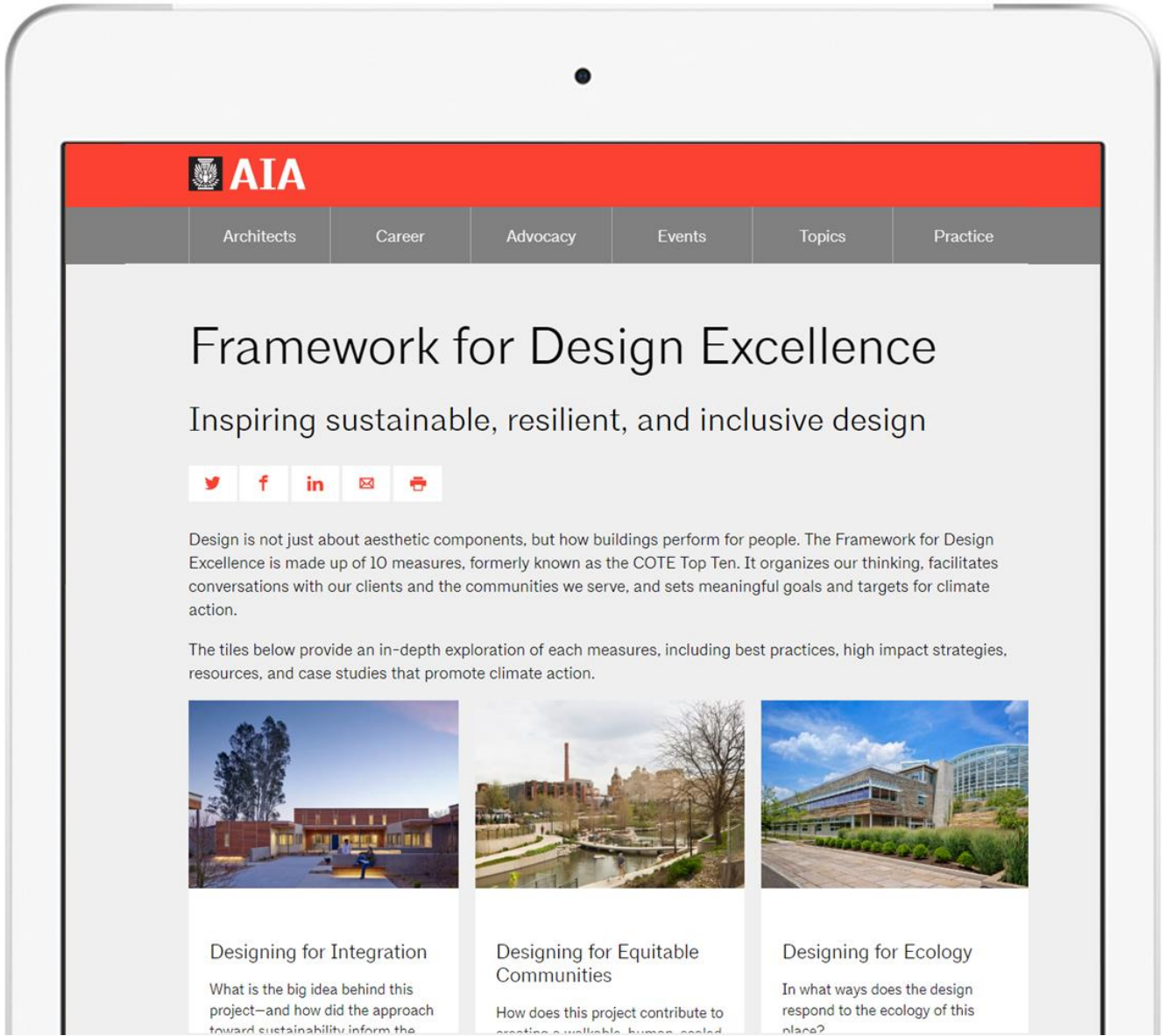
Beyond zero

with the Framework for Design Excellence

AIA Framework for Design Excellence

- Design for integration
- Design for energy
- Design for equitable communities
- Design for well-being
- Design for ecosystems
- Design for resources
- Design for water
- Design for change
- Design for economy
- Design for discovery

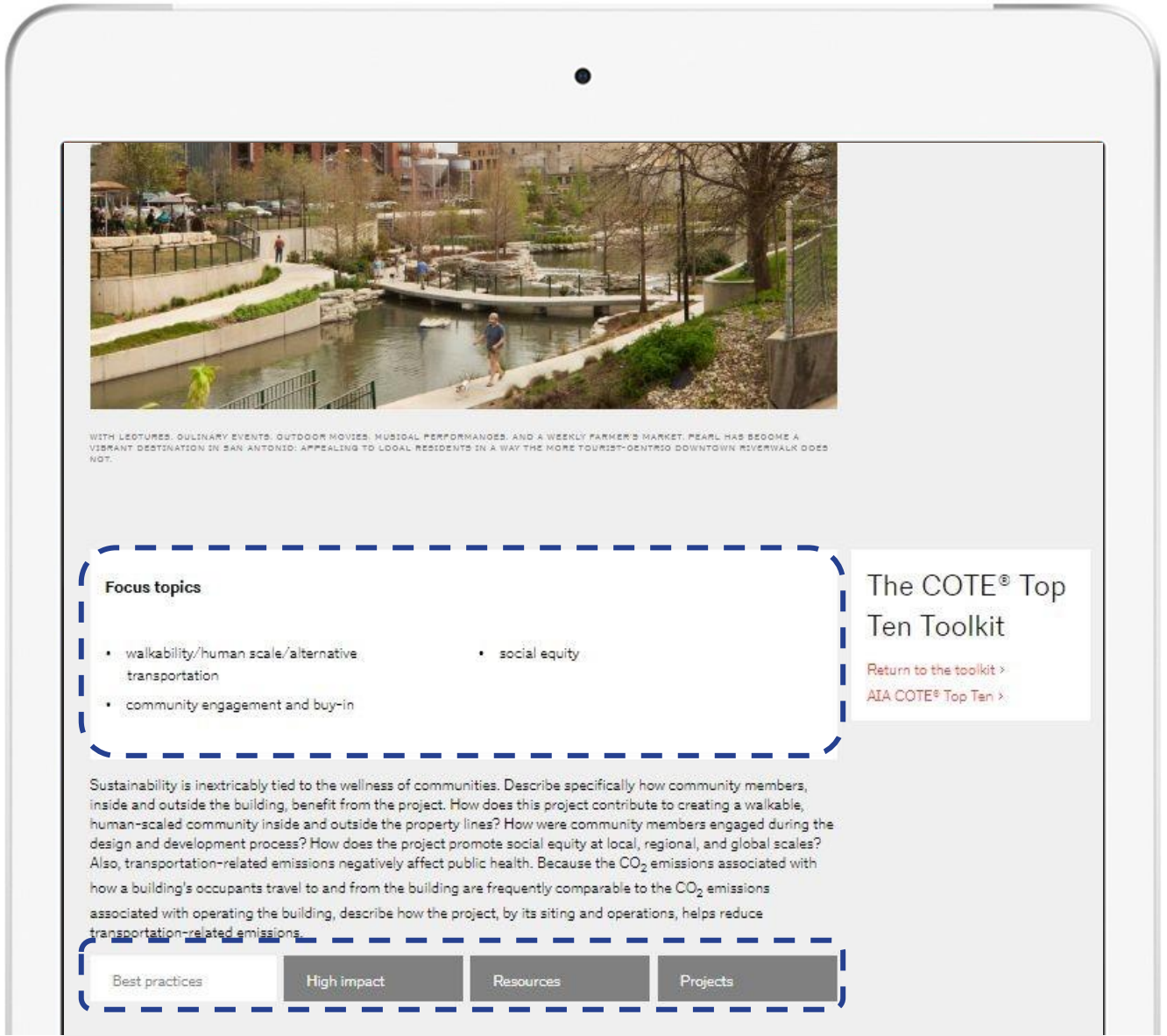
You can learn more about each principle by exploring the tiles associated with them on the Framework for Design Excellence webpage, as well as the COTE® Super Spreadsheet.



Each tile includes a description of the principle and focus topics.

Click on each of the tabs to explore:

- best practices
- high impact design strategies
- resources to learn more, and
- exemplary project case studies.



Design for integration

Edith Green Wendell Wyatt Modernization
Portland, OR, USA
Sera Architects

Design for integration

- **COTE® Design DataMap**
- **Qualities of Resilience**
- **Resilience & Adaptation Online Certificate series**
  - Course 5: Conducting Vulnerability Assessments

- **How to integrate resilience into practice**
- **Sustainable Justice 2030: Green Guide to Justice**

Design for equitable communities

Bushwick Inlet Park
Brooklyn, NY, USA
Kiss + Cathcart

Design for equitable communities

- **AIA Equity Guides**
- **Communities by Design (CxD)**
  - SDAT
  - R/UDAT
- **New Urban Agenda (NUA)**
- **Blueprint for Better**

- **Resilience & Adaptation Online Certificate series**
  - Course 9: Community Design and Engagement for Resilience


Design for ecosystems
Center for Sustainable Landscapes
Pittsburgh, PA, USA
The Design Alliance Architects

Design for water

Bullitt Center
Seattle, WA, USA
The Miller Hull Partnership

Design for water

- Resilience & Adaptation Online Certificate series
- Hazard Mitigation Design Resources
- Climate Change Adaptation Design Resources
- Drylands Resilience Initiative

Design for economy

Clock Shadow Buildings
Milwaukee, WI, USA
Continuum Architects + Planners

Design for economy

- **Resilience & Adaptation Online Certificate series**
  - Course 8: Professional Risk and the Business Case for Resilience
- **Modular and Off-Site Construction Guide**
- **Firm survey**
- **ABI/ GABI**
- **Consensus Construction Forecast**
- **Client Survey**
- **Home Design Trends Survey**
- **Architects Guide to Business Continuity**

Design for energy

West Branch of the Berkeley Public Library
Berkeley, CA, USA
Leddy Maytum Stacy Architects

Design for energy

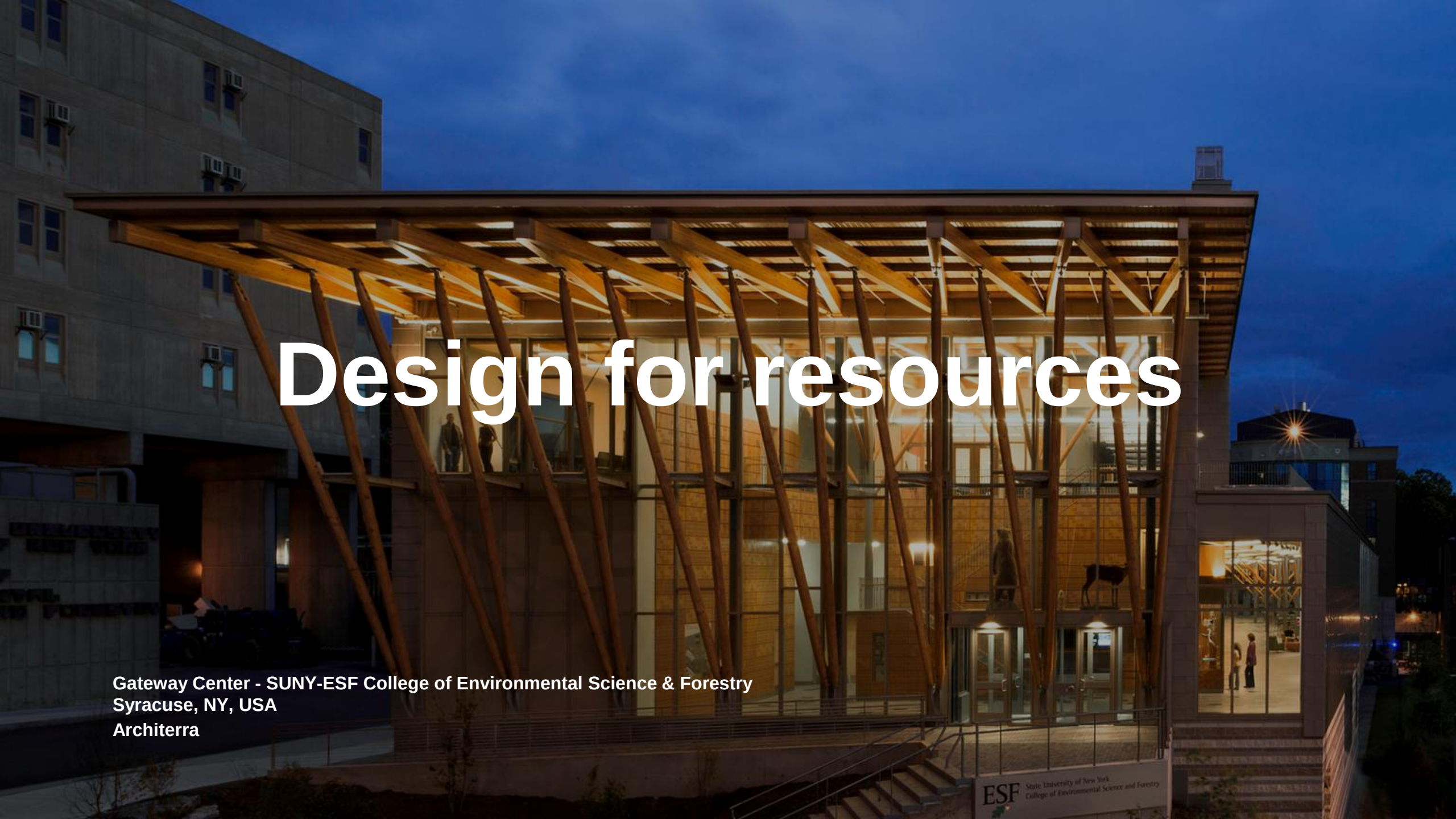
- 2030 Commitment
- Firm commitment to zero energy by 2030
- Design Data Exchange (DDx)
- 2030 By the Numbers (annual report)
- AIA + 2030 Education series
- Architect’s Guide to Building Performance
- Leveraging Energy Benchmarking whitepaper
- Deep Energy Retrofits Guide
- Resilience & Adaptation Online Certificate series

Design for well-being

University of Wyoming - Visual Arts Facility
Laramie, WY, USA
Hacker

Design for well-being

- **Design and Health Research Consortium**
- **Joint Call to Action to Promote Healthy Communities**
  - Conversation guides
  - Call to action
- **AIAU Designing for Health series**
- **Healthier Materials Protocol**
- **Safety Assessment Program Training**
- **Knowledge Repository**
- **AAH Case Studies**
- **Design for Aging POE Toolkit**



Design for resources

Gateway Center - SUNY-ESF College of Environmental Science & Forestry
Syracuse, NY, USA
Architerra

Design for resources

- Healthier Materials Protocol
- AIAU Materials Matter Online Certificate series
- Resilience & Adaptation Online Certificate series
- AIA NY Zero Waste Design Guidelines
- Buildings That Last: Designing for Adaptability, Deconstruction, and Reuse

Design for change

NOAA Daniel K. Inouye Regional Center
Honolulu, HI, USA
HOK

Design for change

- Modular and Off-site Construction Guide
- Disaster Assistance Handbook
- Resilience & Adaptation Online Certificate series
- Building Industry Statement on Resilience
- Hazard Mitigation Design Resources

- Climate Change Adaptation Design Resources
- Community Resilience Design Resources
- Buildings That Last: Designing for Adaptability, Deconstruction, and Reuse

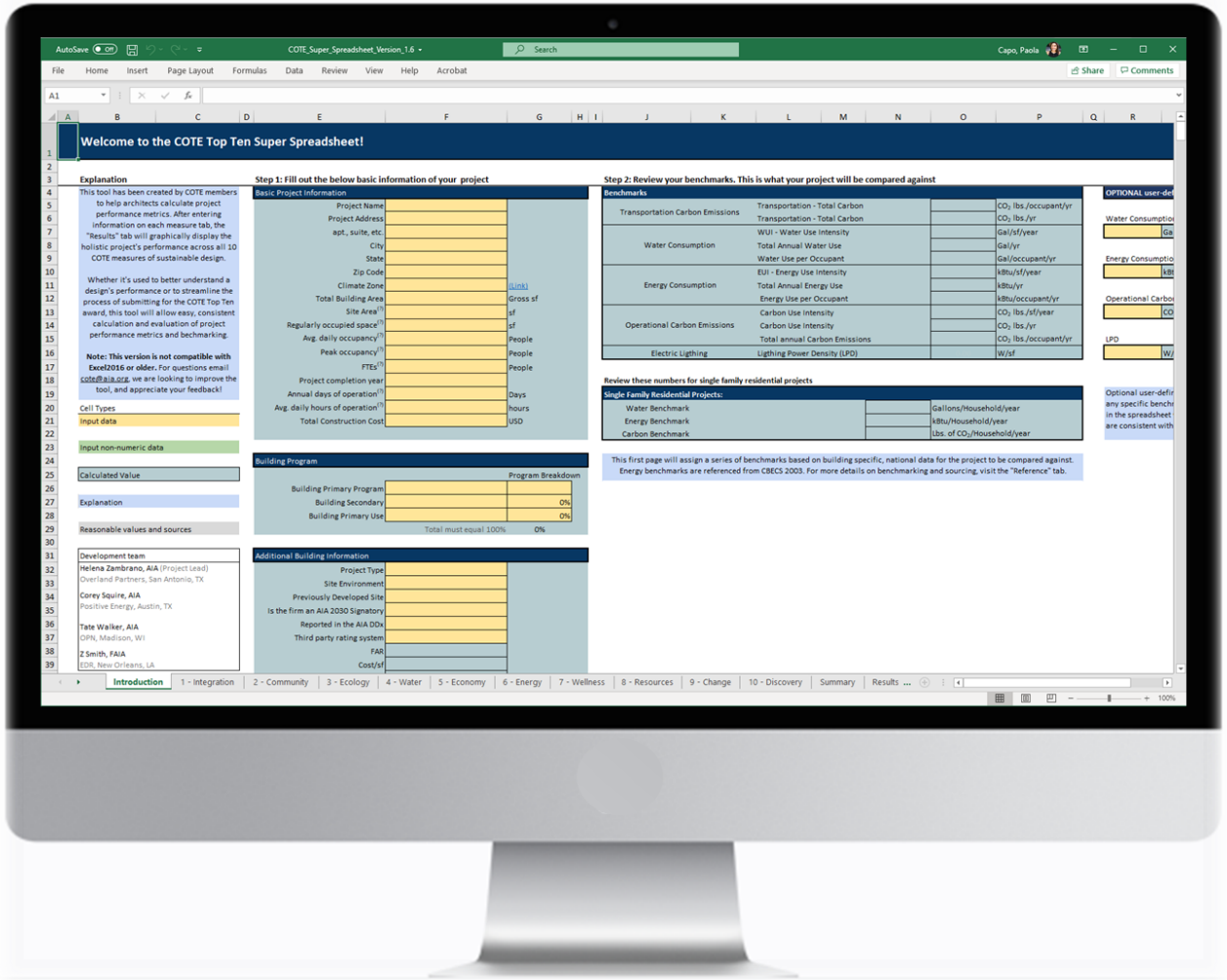
Design for discovery

Discovery Elementary School
Arlington, VA, USA
VMDO Architects

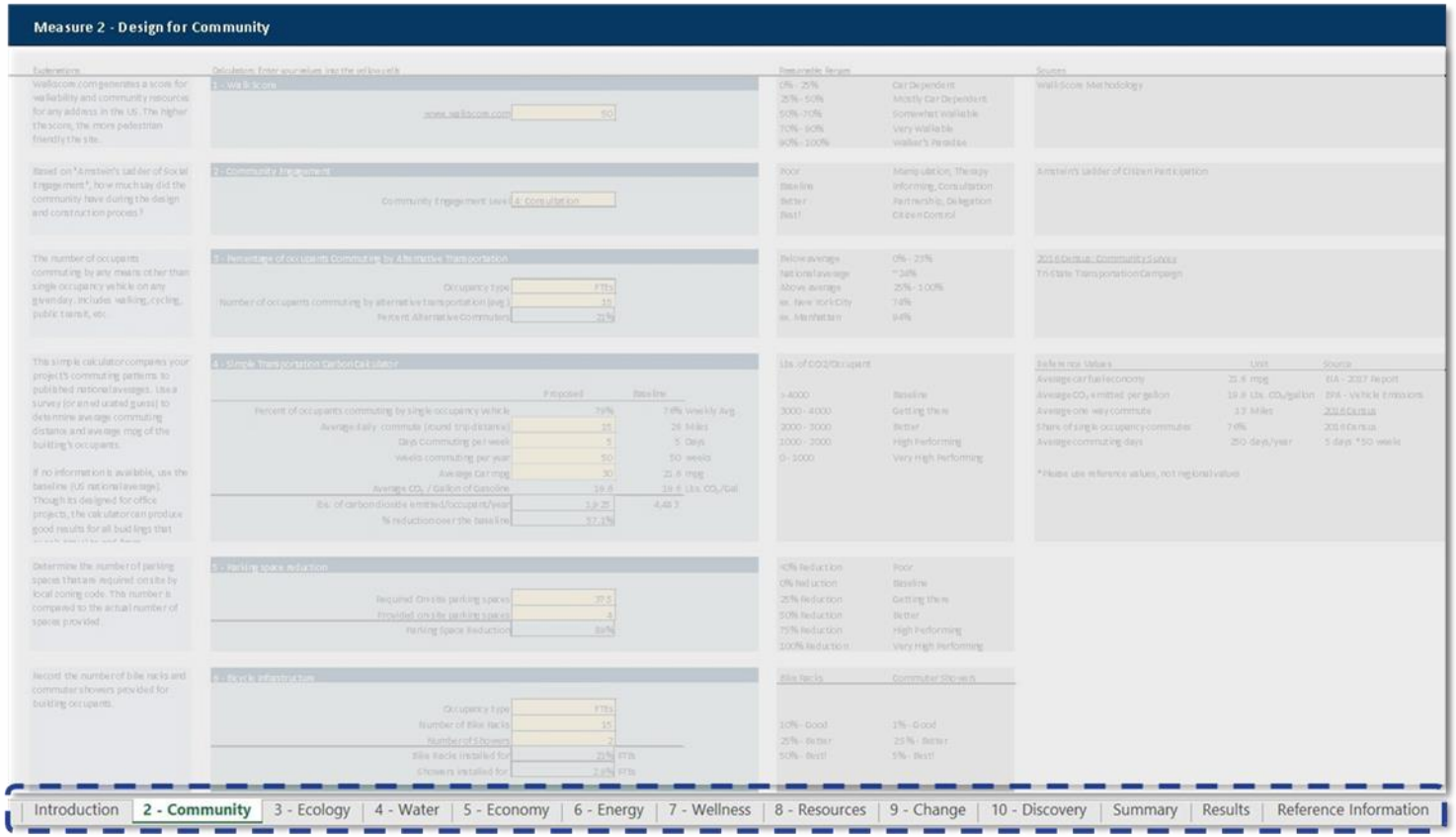
Design for discovery

- **Design Data Exchange (DDx)**
- **BRIK**
- **Design for Aging POE Toolkit**
- ***POE toolkit development*** *(coming soon)*

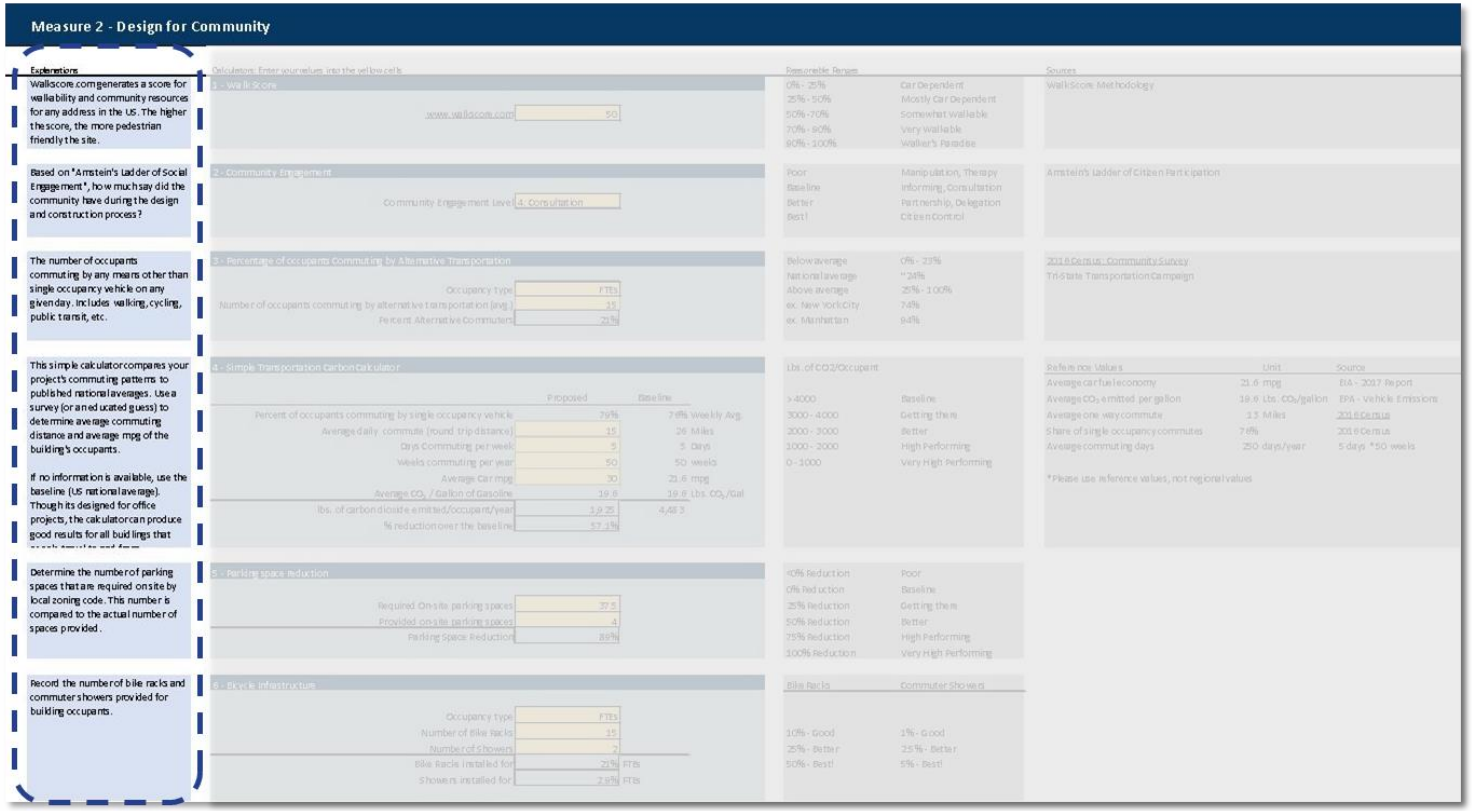
Use the COTE® Top Ten Super Spreadsheet to dive deeper into the metrics associated with each of the ten principles.



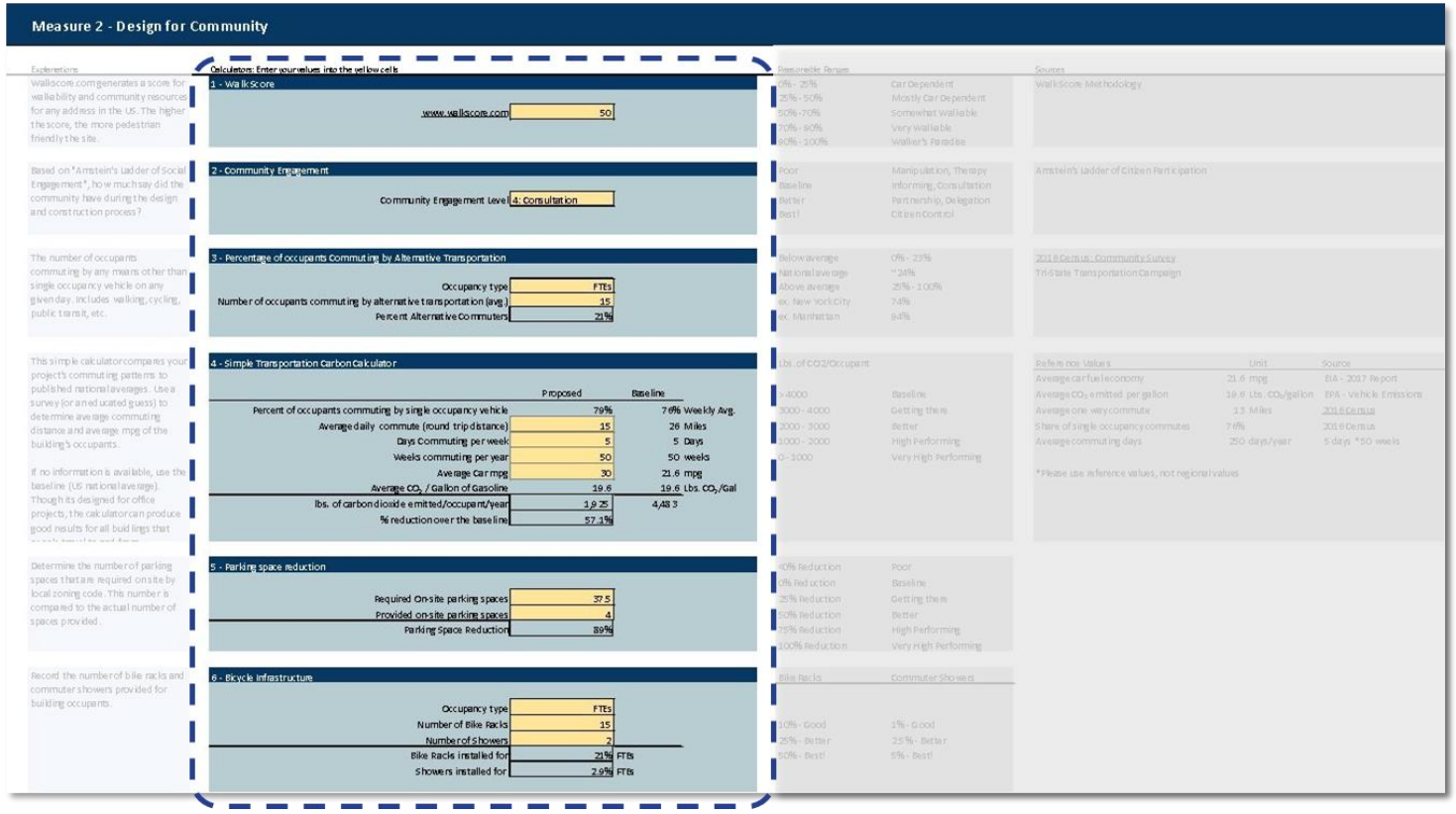
Explore each measure using the tabs at the bottom of the spreadsheet



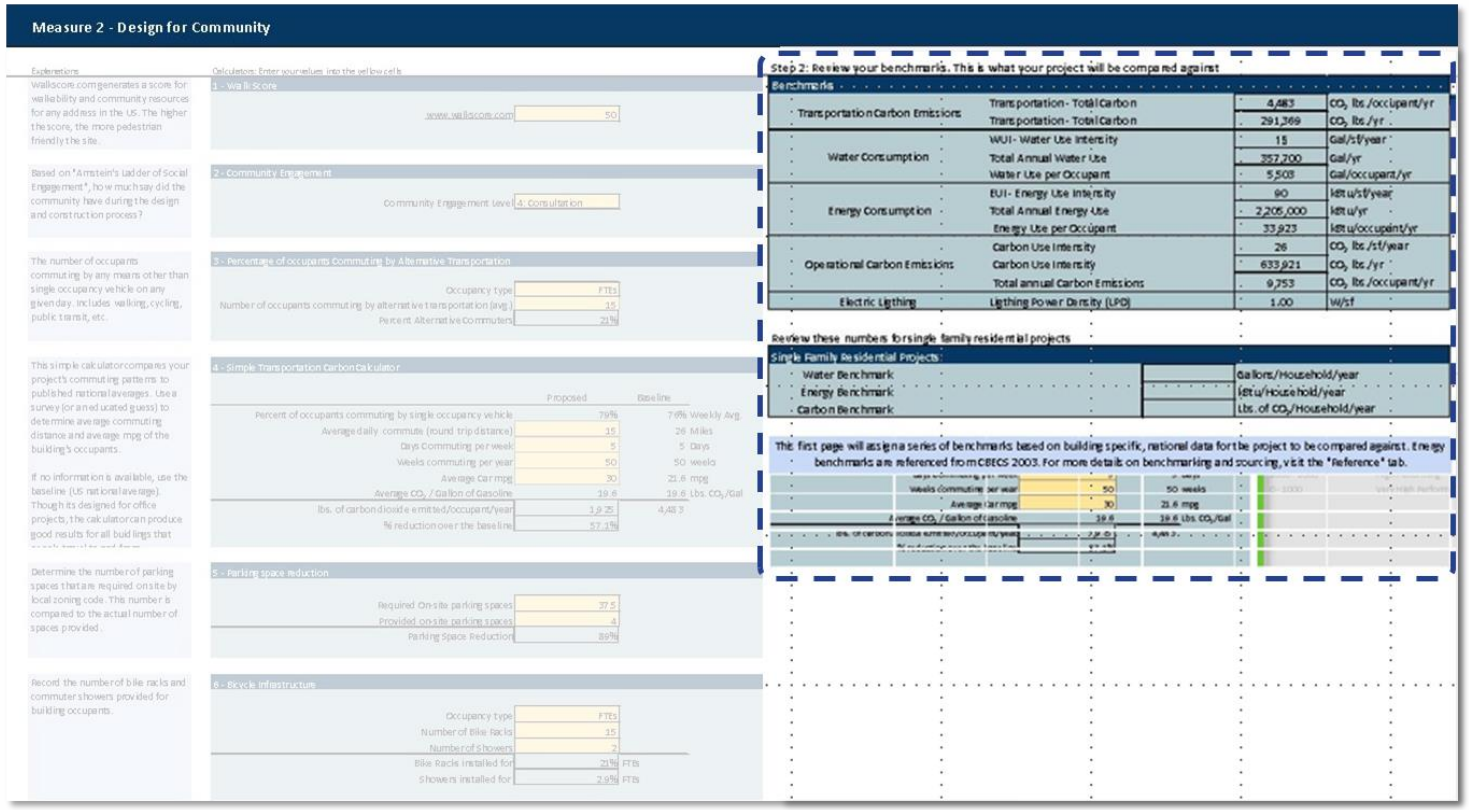
Each measure has instructions to help you navigate each metric.



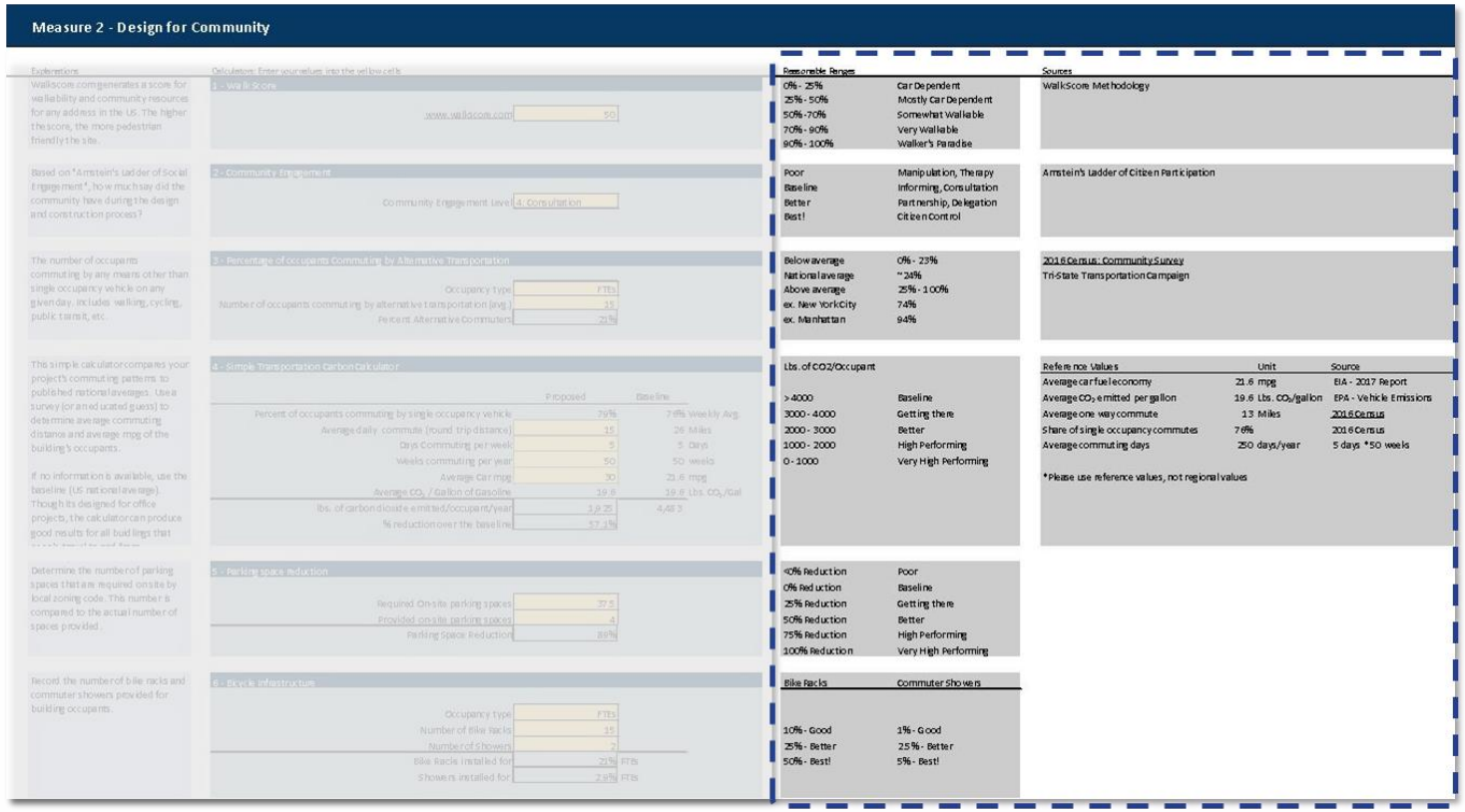
Input your project's corresponding value for each metric.



Review your benchmarks. This is what your project will be compared against.



For further guidance, explore the sections on reasonable ranges and sources.



Measure 2 - Design for Community

Explanations

WalkScore.com generates a score for walkability and community resources for any address in the US. The higher the score, the more pedestrian friendly the site.

Based on "Arnstein's Ladder of Social Engagement", how much say did the community have during the design and construction process?

The number of occupants commuting by any means other than single occupancy vehicle on any given day. Includes walking, cycling, public transit, etc.

This simple calculator compares your project's commuting patterns to published national averages. Use a survey (or an educated guess) to determine average commuting distance and average mpg of the building's occupants.

If no information is available, use the baseline (US national average). Though its designed for office projects, the calculator can produce good results for all buildings that

Determine the number of parking spaces that are required on site by local zoning code. This number is compared to the actual number of spaces provided.

Record the number of bike racks and commuter showers provided for building occupants.

Calculators: Enter your values into the yellow cells

1 - Walk Score

www.walkscore.com 50

2 - Community Engagement

Community Engagement Level 4: Consultation

3 - Percentage of occupants Commuting by Alternative Transportation

Occupancy type	FTEs
Number of occupants commuting by alternative transportation (avg.)	15
Percent Alternative Commuters	21%

4 - Simple Transportation Carbon Calculator

	Proposed	Baseline
Percent of occupants commuting by single occupancy vehicle	79%	74% Weekly Avg.
Average daily commute (round trip distance)	15	26 Miles
Days Commuting per week	5	5 Days
Weeks commuting per year	50	50 Weeks
Average Car mpg	30	21.6 mpg
Average CO_2 / Gallon of Gasoline	19.6	19.6 Lbs. CO_2/Gal
lbs. of carbon dioxide emitted/occupant/year	3,825	4,483
% reduction over the baseline	57.1%	

5 - Parking Space Reduction

Required On-site parking spaces	37.5
Provided on-site parking spaces	4
Parking Space Reduction	89%

6 - Bicycle Infrastructure

Occupancy type	FTEs
Number of Bike Racks	15
Number of Showers	7
Bike Racks installed for	21% FTEs
Showers installed for	7.8% FTEs

Reasonable Ranges

0% - 25%	Car Dependent
25% - 50%	Mostly Car Dependent
50% - 70%	Somewhat Walkable
70% - 90%	Very Walkable
90% - 100%	Walker's Paradise

Sources: WalkScore Methodology

Poor	Manipulation, Therapy
Baseline	Informing, Consultation
Better	Partnership, Delegation
Best!	Citizen Control

Arnstein's Ladder of Citizen Participation

Below average	0% - 23%
National average	~24%
Above average	25% - 100%
ex. New York City	74%
ex. Manhattan	94%

2016 Census: Community Survey
Tri-State Transportation Campaign

Lbs. of CO2/Occupant

>4000	Baseline
3000 - 4000	Getting there
2000 - 3000	Better
1000 - 2000	High Performing
0 - 1000	Very High Performing

Reference Values	Unit	Source
Average car fuel economy	21.6 mpg	EIA - 2017 Report
Average CO_2 emitted per gallon	19.6 Lbs. CO_2/gallon	EPA - Vehicle Emissions
Average one way commute	13 Miles	2016 Census
Share of single occupancy commutes	76%	2016 Census
Average commuting days	250 days/year	5 days *50 weeks

*Please use reference values, not regional values

<0% Reduction	Poor
0% Reduction	Baseline
25% Reduction	Getting there
50% Reduction	Better
75% Reduction	High Performing
100% Reduction	Very High Performing

Bike Racks	Commuter Showers
10% - Good	1% - Good
25% - Better	2.5% - Better
50% - Best!	5% - Best!

Lessons

from the field

Resources

Resources to improve energy performance

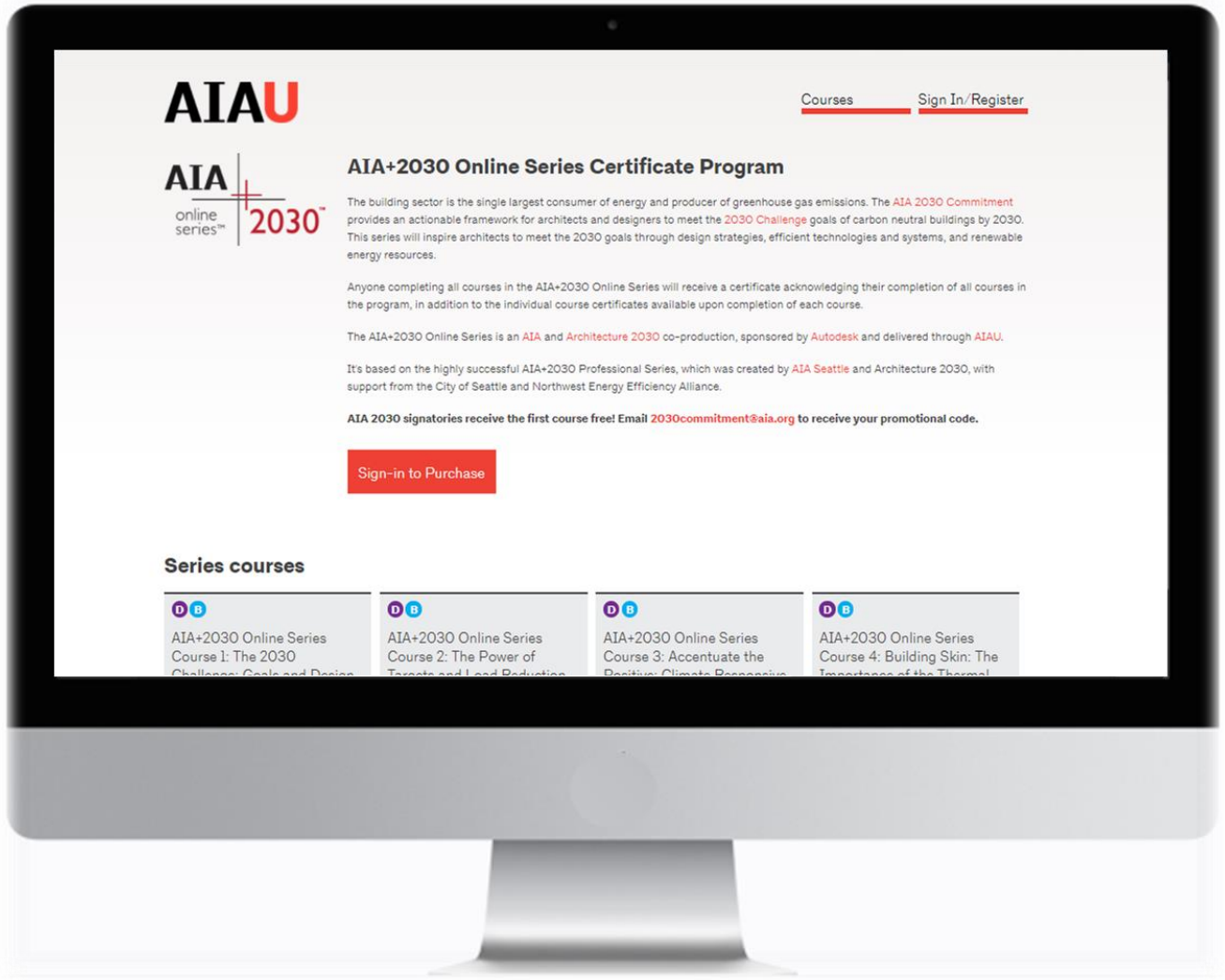
AIA resources

- Design Data Exchange
- AIA 2030 roundtables & peer networks at local chapters
- AIA Framework for Design Excellence
- AIA+2030 AIAU Certificate Series
- Architect's Guide to Building Performance (2019)
- Leveraging Energy Transparency (2019)

Additional resources

- Zero Tool by Architecture 2030
- Target Finder by EPA
- Procedures for Commercial Building Energy Audits by ASHRAE
- Getting to Zero Database by New Buildings Institute
- EUI Analyzer by Slipstream

Explore courses on AIAU that focus on how your firm can work towards the 2030 targets.



Architect's Guide to Building Performance is one of many stellar free PDF resources available to AIA members.

Explore the reach and impact architects like you have through the 2030 Commitment by checking out our reports.

Join—or establish—a local 2030 Roundtable or COTE® group to build a sustainability community in your backyard!

Learn more at aia.org/2030Commitment

Or send questions to us directly **2030Commitment@aia.org**.