2030
BY THE NUMBERS

The 2023 summary of
the AIA 2030 Commitment

ABOUT THE AMERICAN INSTITUTE OF ARCHITECTS

Founded in 1857, AIA consistently works to create more valuable, healthy, secure, and sustainable buildings, neighborhoods, and communities. Through more than 200 international, state, and local chapters, AIA advocates for public policies that promote economic vitality and public wellbeing.

AIA provides members with tools and resources to assist them in their careers and business as well as engaging civic and government leaders and the public to find solutions to pressing issues facing our communities, institutions, nation, and world. Members adhere to a code of ethics and conduct to ensure the highest professional standards.

ABOUT THIS REPORT

2030 By the Numbers: The 2023 Summary of the AIA 2030 Commitment measures annual performance of the architecture and design community toward its goal of carbon neutral buildings by 2030. It includes data from calendar year 2023 and suggestions for improving performance year to year.

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This analysis highlights project-level information pulled on April 26, 2024 for projects included in RY2023 portfolio submissions.

Cover photo by Kelly Callewaert.

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FOREWORD

By Lakisha Ann Woods, CAE EVP/CEO The American Institute of Architects

In these times of environmental and social change, the architecture and design community is responding. Emerging technologies and design research are at the forefront of ensuring buildings contribute to healthy spaces, have carbon-neutral emissions, and are adaptive to changing conditions. Furthermore, architects and designers are increasing their understanding of the social injustice that continues to underpin the development of the built environment and addressing how design can be a catalyst in creating a better built environment for all its inhabitants. The A&D industry is transforming—and AIA 2030 Commitment signatories are leading the way.

This year's 2030 By the Numbers (RY23) collects data from a growing signatory community dedicated to mobilizing their firm's practice to meet the goals of net zero carbon buildings. At the foundation of the AIA 2030 Commitment is the design of high-performance buildings. The data shows that the industry is making positive strides toward this goal—but there is still more work to be done. Almost five years away from 2030, it is now time for quantified self-evaluation, firm-driven industry transparency, and monumental change.

Climate change is a health, safety, and welfare crisis. Ignoring it would undermine our most critical professional responsibility: to protect our clients, our communities, and our earth.

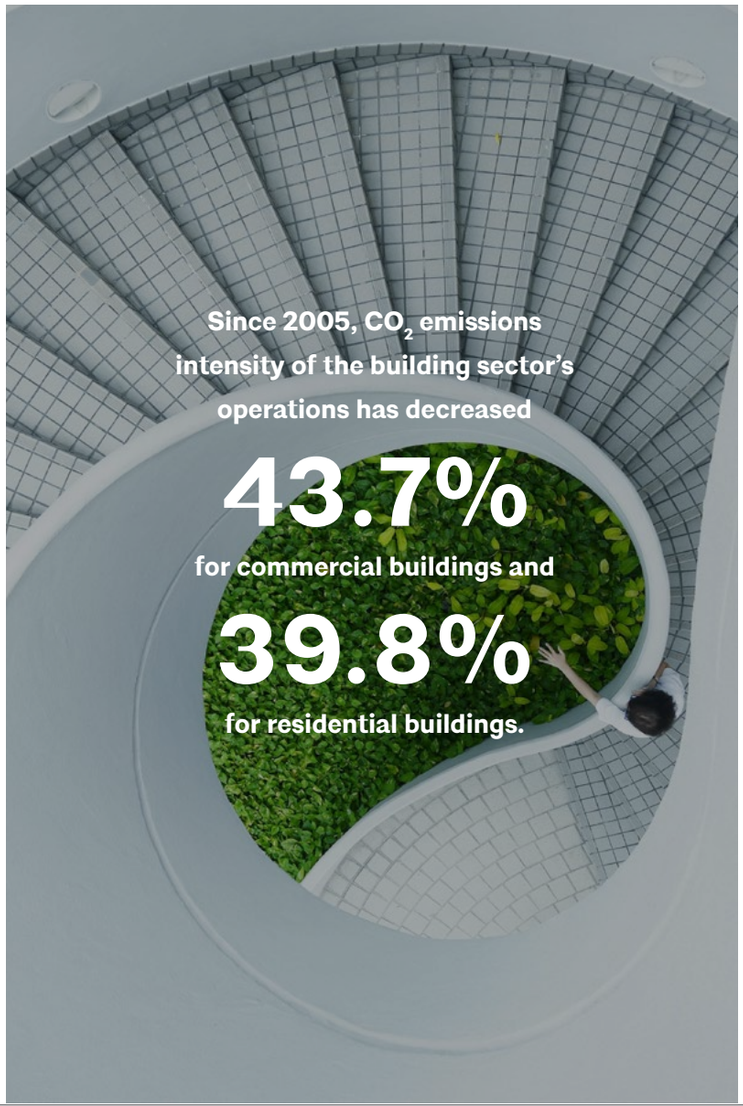
THE CURRENT MOMENT

Earlier this year, the Biden-Harris Administration and the U.S. Department of Energy (DOE) released the National Definition of a Zero Emissions Building. Intended to give clear guidance on how the AEC industry, real estate sector, governments, and nongovernmental organizations measure zero emissions, this announcement contributes to the developing blueprint of how the buildings sector must decarbonize in the coming decades. This comes at the heels of continued record-breaking heat and ahead of a predicted above-normal 2024 Atlantic hurricane season. The climate crisis and its impacts are evident, and they aren't felt equally. As these impacts continue to exacerbate, underserved communities are least equipped to prepare for, respond to, and recover from extreme weather events, increasing heat waves, and poor air quality, among other climate effects.

Photo: Getty Images

Architects and designers have the unique skill set, and responsibility as conveners of built environment stakeholders, to ensure that good design produces zero-carbon, healthy, resilient, and equitable outcomes for communities. Innovative initiatives and transformations are happening at the local, state, and grassroots levels as well: AIA's Chief Architect initiative acknowledges that architects can think critically about and holistically address the complex challenges that communities face. California's recently updated building code is the first in the nation to tackle embodied carbon by mandating certain reductions in embodied carbon for the construction, renovation, or adaptive reuse of commercial buildings larger than 100,000 square feet and schools over 50,000 square feet. Projects around the world are catalyzing innovative ways we can use materials in connection to the natural world—and how the built environment can be a vehicle for that work.

Alongside these movements are companies and industries, local and state governments that are establishing climate targets for the upcoming decades. There are now year-specific goals for 2030, 2040, 2050, and beyond to drastically cut the emissions that our business-as-usual culture has historically ignored. Architecture 2030 and AIA have advanced this goal-driven mindset since the inception of the 2030 Challenge and 2030 Commitment in 2006 and 2010, respectively. To reach our emission-reduction goals, we must track the data to see where the industry currently stands and inform progress over time.



Data source: Architecture 2030, U.S. Energy Information Administration (EIA), Annual Energy Outlook (AEO)

Photos (from left to right): Danist Soh on Unsplash; Alexander Abero on Unsplash

OUR PATHS FORWARD

To understand the full scope of emissions that buildings contribute to the climate crisis, total carbon, which encompasses buildings' full life cycle footprint, is becoming the measurement standard. Total (whole life) carbon is 1) operational carbon, the emissions associated with energy used to operate a building; and 2) embodied carbon, the emissions associated with materials and construction processes over the whole life cycle of a building. With its most recent updates, the Design Data Exchange (DDx) now calculates and tracks operational carbon to help architects understand how their projects are contributing—or avoiding—carbon emissions. Since 2020, the DDx has collected embodied carbon data, a feature that has seen skyrocketing engagement. That first year, 55 firms reported 291 projects; four years later, the number of firms has almost tripled to 154 firms reporting 7,067 projects with embodied carbon data. AIA is leading this charge in measuring the impact architects have on the built environment with its two climate action pledge programs: Both the 2030 Commitment and Architecture & Design Materials Pledge are now tracking metrics across their collective signatory community of over 1,400 architecture and design firms. Every step of the process, from collecting and analyzing data on the project level to cataloging firmwide sustainability action plans, informs industry transformation to create a better built environment.

Photo by Alan Karchmer

To address both climate change and historic social injustices, design excellence becomes the gold standard for architects and designers. Success means building a resilient, equitable, zero-carbon, and healthy built environment for everyone.

2023 AT A GLANCE

50%
overall pEUI reduction.

490
companies reported data.

31
companies met the 80% predicted EUI (pEUI) reduction target across their entire portfolio.

24,742
projects reported.

430
whole-building projects are predicted to be zero net energy.

10%
of reported whole-building GSF meets the 80% pEUI reduction target.

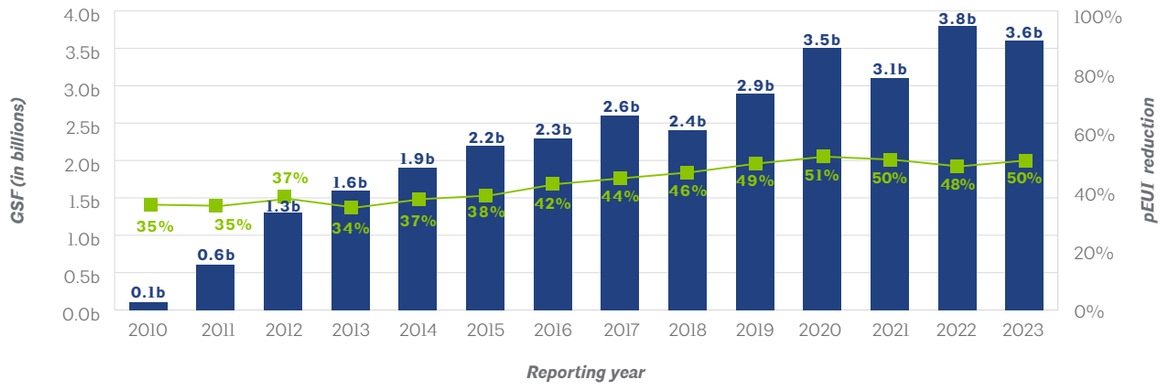
64%
of reported interior-only GSF meets the 25% predicted lighting power density (pLPD) reduction target.

116
countries represented.

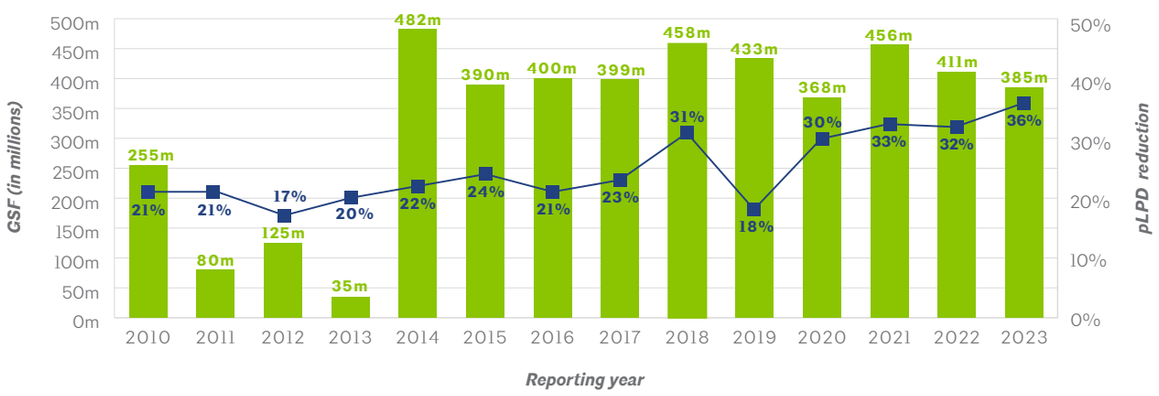
61%
of reported whole-building GSF has been energy modeled.

Photo by Igor Karimov on Unsplash

WHOLE-BUILDING GSF & PEUI % REDUCTION BY YEAR 2010-2023



INTERIOR-ONLY GSF & PREDICTED LIGHTING POWER DENSITY (pLPD) % REDUCTION BY YEAR, 2010-2023



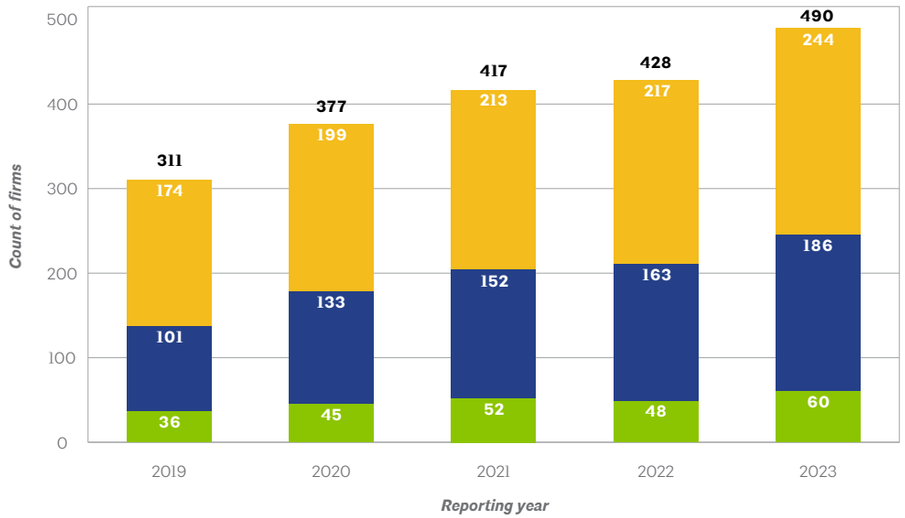
In its 15th year, the AIA 2030 Commitment community continues to engage sustainable design leaders from across the world. Signatory and reporting growth each year furthers the program's reach and makes evident the vital role of architects and designers to reaching a zero-emissions future—with buildings as a key contributor—is important for architects and designers. From early design engagement meetings in schematic design to specifying materials in construction documents, each design phase holds an opportunity to reject business-as-usual practices and instead demonstrate a profession of leaders in climate action and climate justice.

In 2023, 490 signatory companies reported a little over 3.9 billion gross square footage across 24,742 projects and 116 countries through the DDx. These projects accounted for an overall 50% predicted energy usage intensity (pEUI) reduction among whole-building projects and an overall 36% predicted lighting power density (pLPD) reduction among interior-only projects. This year's reported projects also include an explosive increase in projects reporting embodied carbon data, growing to over 7,000 projects. The DDx is continuing to expand to collect more embodied carbon data, including growing the number of listed embodied carbon tools and further analysis of project scopes in the embodied carbon calculations. This upcoming cycle of DDx updates will also include key alignment with the Embodied Carbon Harmonization and Optimization (ECHO) project, ensuring the entire AEC industry is collecting and measuring the same metrics. Projects including renewable energy continue to steadily increase, this year reaching almost 9% of total projects, and building electrification is rapidly growing, demonstrating that the grid must become cleaner quicker.

These shifts aren't just happening project by project—they're being influenced by changes in overall firm culture. A high-performance firm that prioritizes peer-to-peer engagement, clearly communicated firmwide goals and mission, and data-driven operations leads to better designs that create sustainable, resilient, and equitable outcomes. These firms are 2030 signatories, and they are transforming their practices by utilizing the following key strategies:

- **Modeling building energy use** at multiple design stages to keep the team focused throughout the process on passive design strategies and other energy-efficiency measures;
- Transitioning away from fossil fuels through **building electrification**;
- Using **on-site and/or off-site renewable energy**; and
- **Reducing the embodied carbon of buildings** to help mitigate the GHG emissions from the extraction of raw materials, manufacturing, transportation, installation, maintenance, and disposal or recycling.

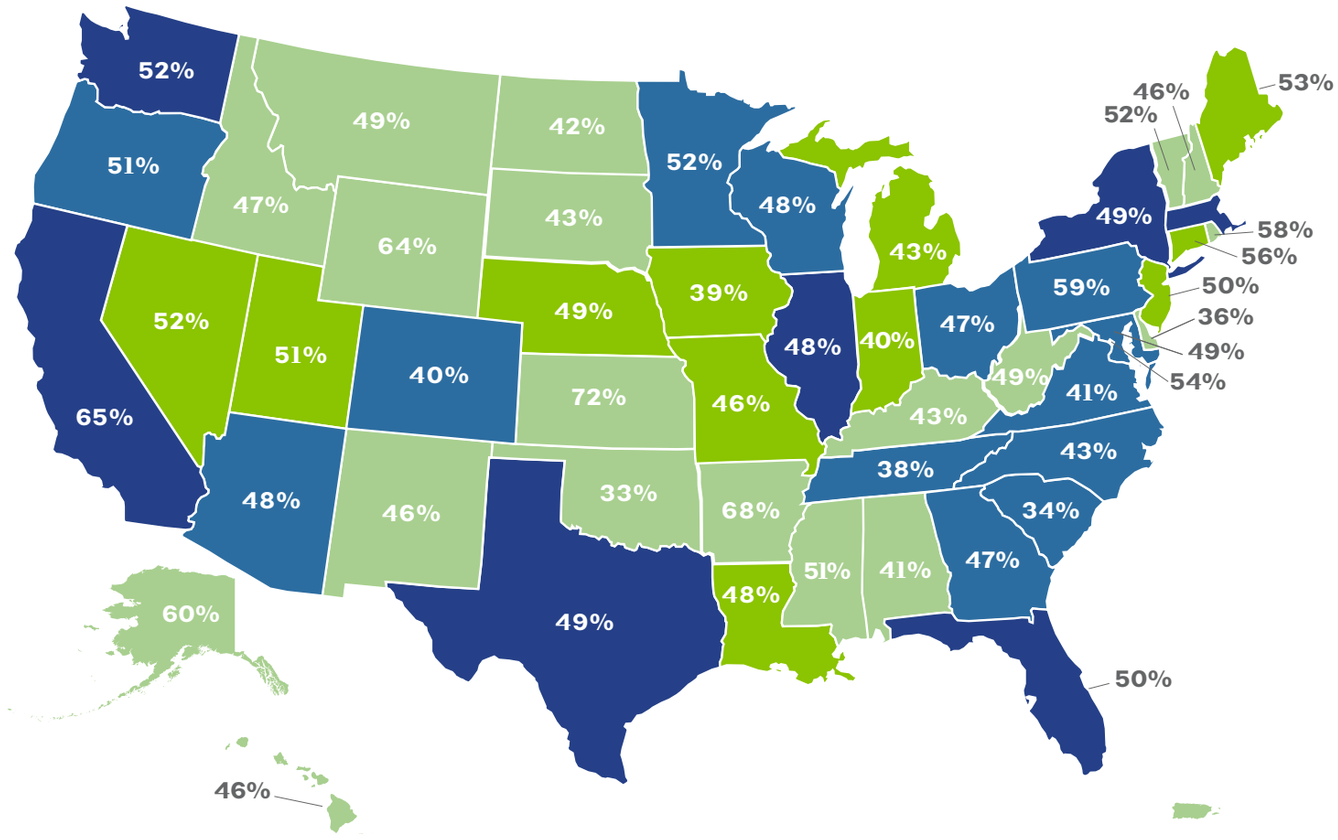
IMPACT OF REPORTING FIRMS BY SIZE, 2018-2023



Key

- large firms (50+)
- medium firms (10–49)
- small firms (1–9)

pEUI % REDUCTION BY STATE

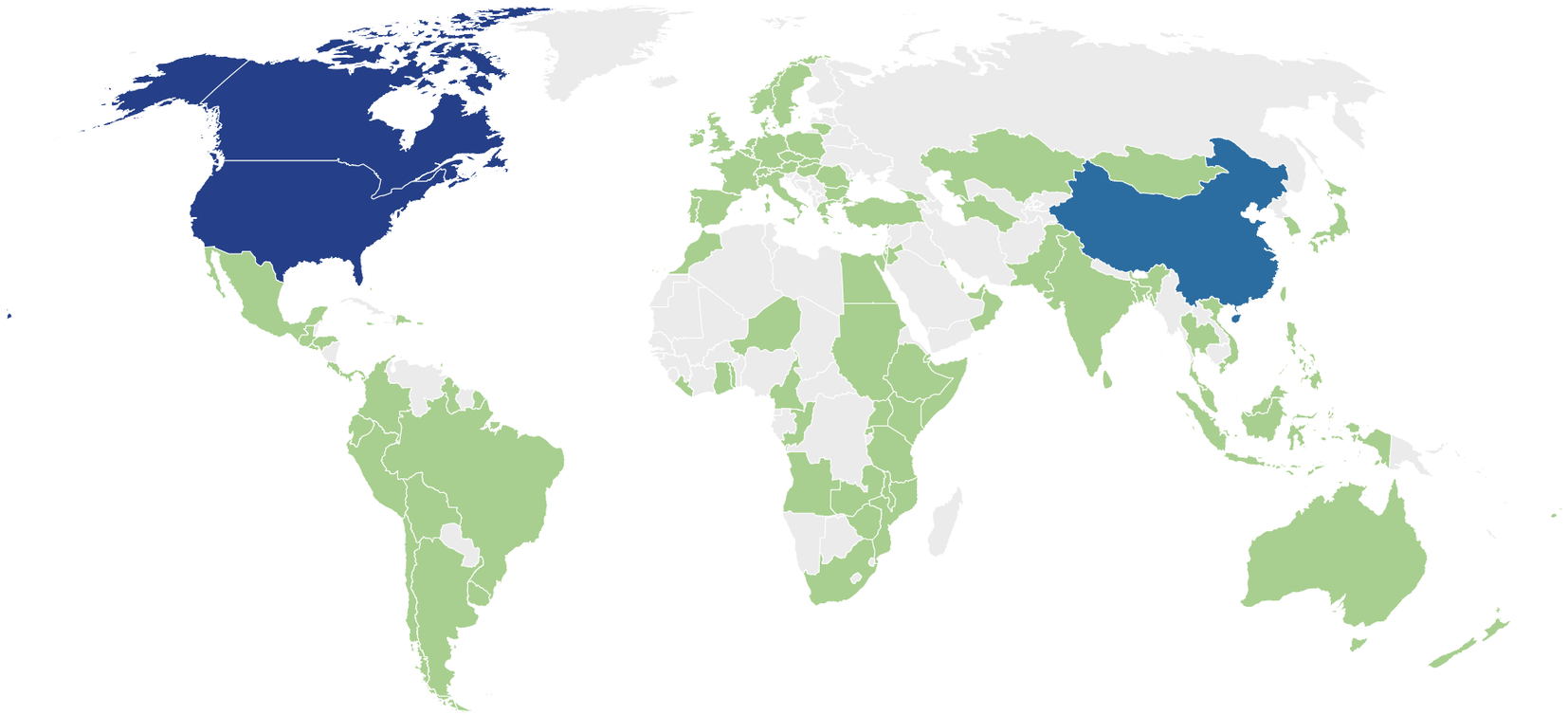


In the U.S. alone, signatory firms reported 14,336 whole-building projects totaling approximately 2.2 billion gross square feet. The U.S. national weighted average pEUI reduction was 51%.

Number of whole-building projects

- 1–99
- 100–199
- 200–499
- 500+

GLOBAL FOOTPRINT



Outside of the U.S., signatory firms reported 2,949 projects totaling approximately 1.4 billion gross square feet across 115 countries.

Number of projects

- 1–249
- 250–499
- 500–749
- 750+
- n/a

SECTION 1.

2030 SIGNATORIES ARE MAKING AN IMPACT

Photo by Bruce Damonte Photography

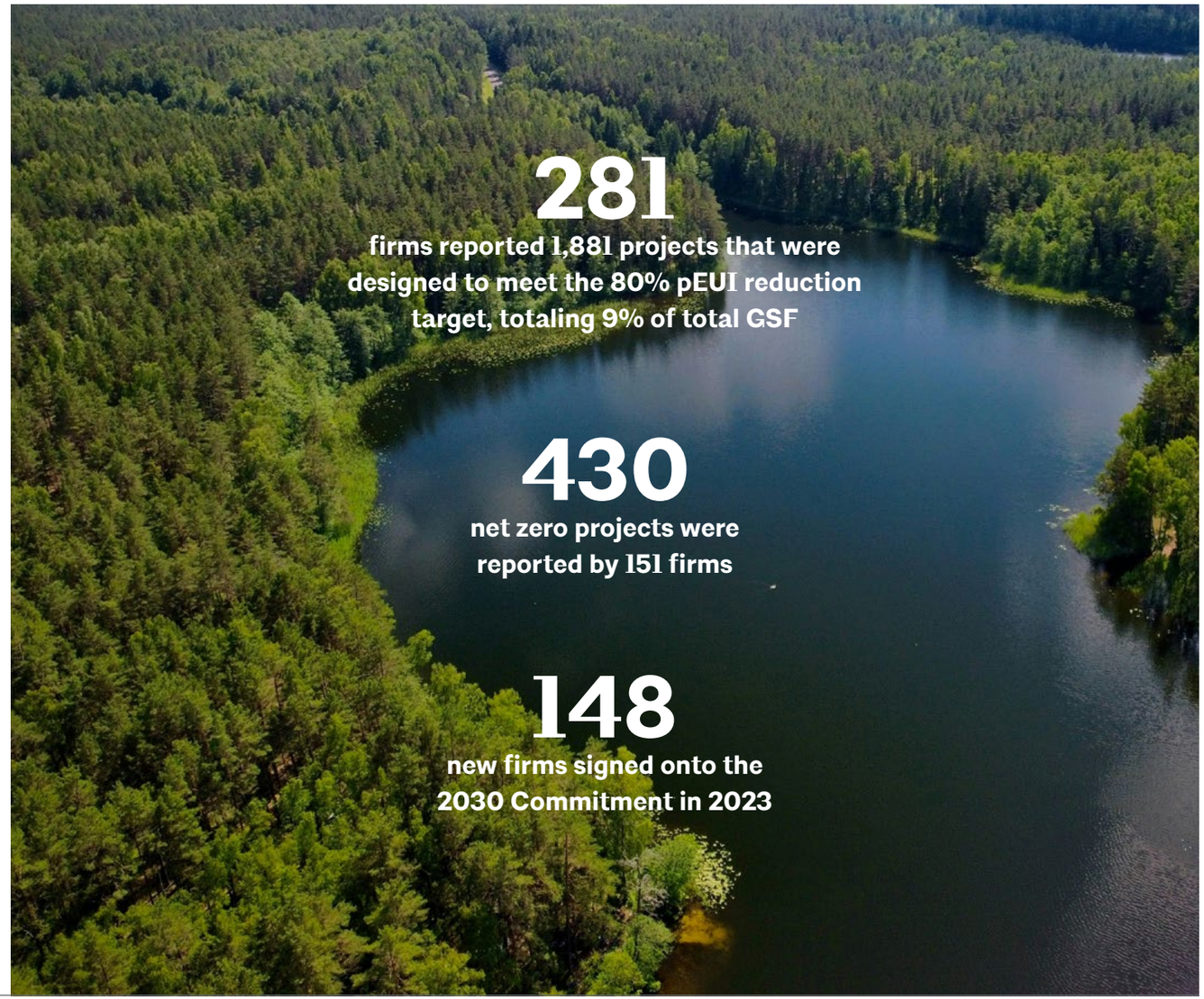
$12.07 billion/year

In 2023, signatories reported projects represent energy savings of more than $12.07 billion over the baseline equivalent

38.5

MILLION MT CO_2E

In 2023, 2030 Commitment projects accounted for an annual overall energy savings equivalent to avoiding 38.5 MT CO_2e.



281

firms reported 1,881 projects that were designed to meet the 80% pEUI reduction target, totaling 9% of total GSF

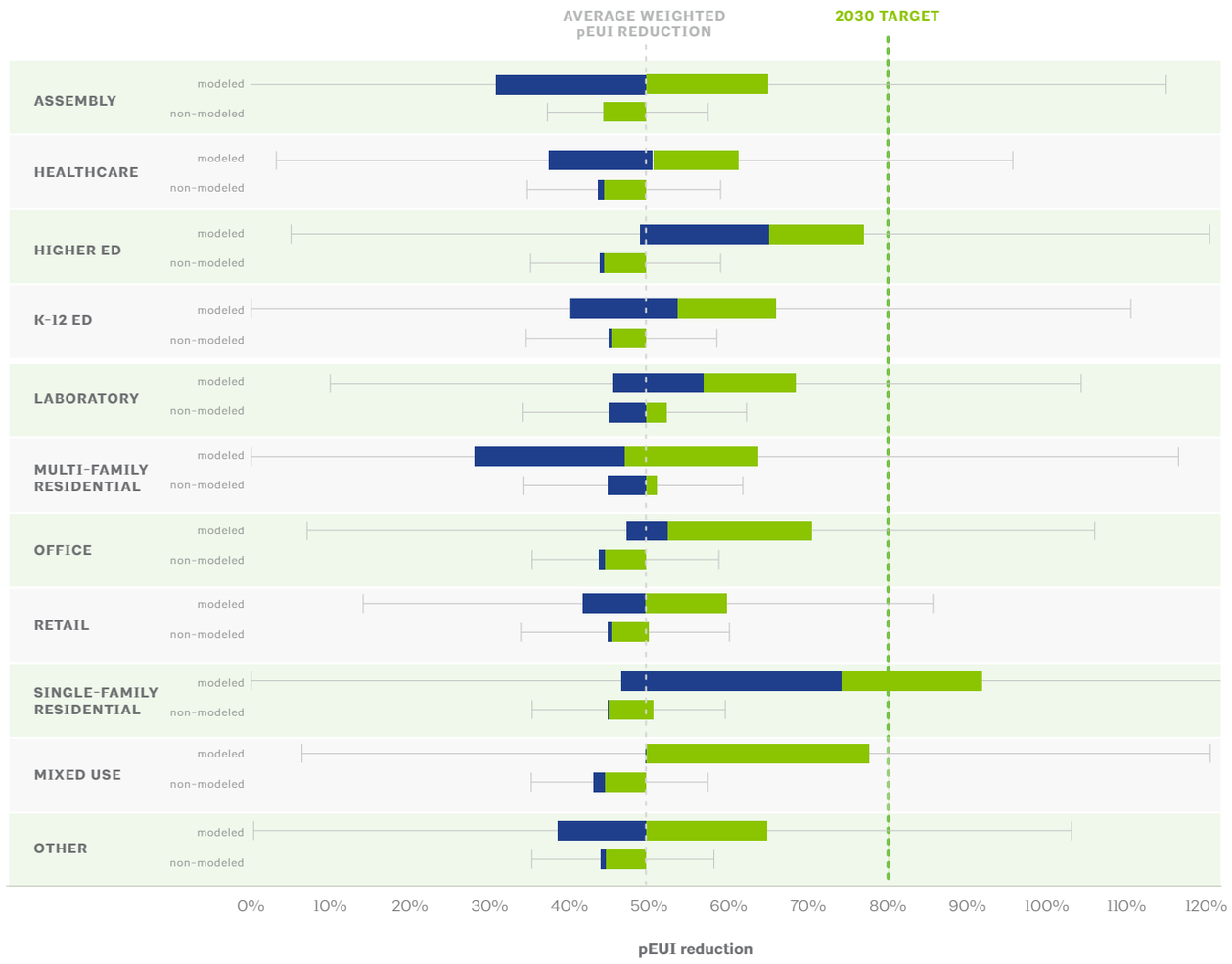
430

net zero projects were reported by 151 firms

148

new firms signed onto the 2030 Commitment in 2023

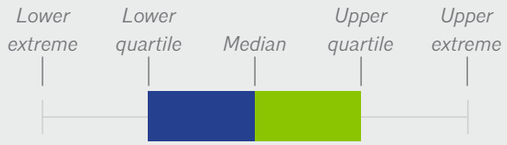
PEUI REDUCTION BY USE TYPE, MODELED VERSUS NON-MODELED



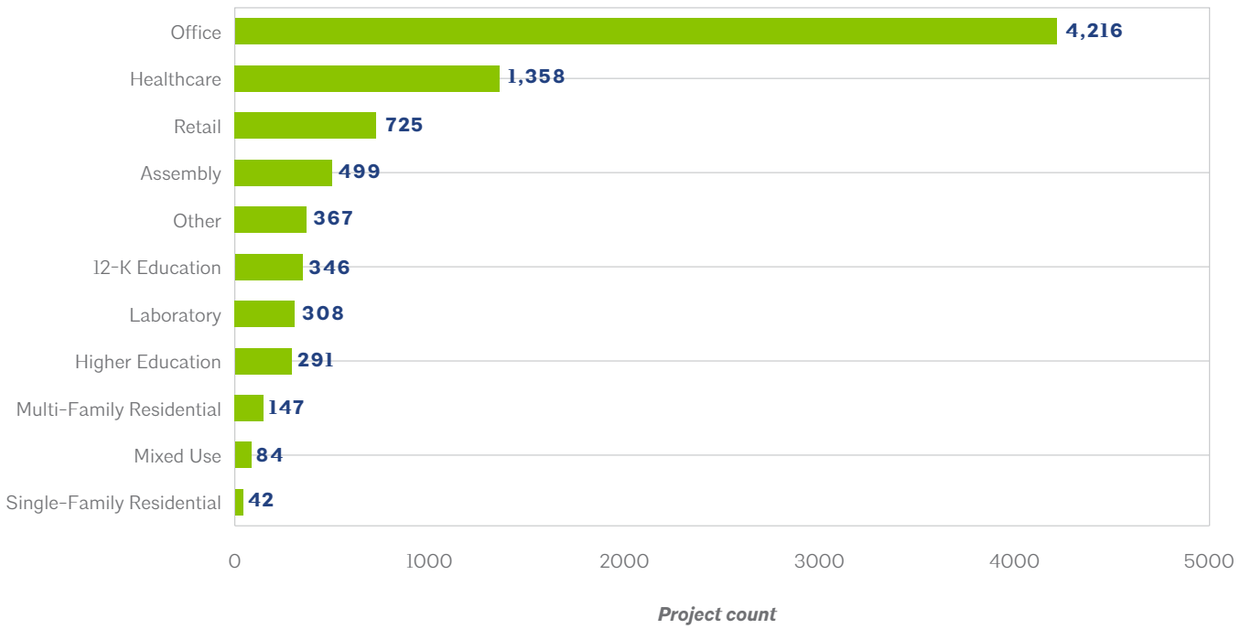
Non-modeled projects closely track the 2023 reporting year average and the energy code minimum pEUI reductions showing the importance of more stringent energy codes.

Modeled projects, while tracking below the target pEUI reduction of 80%, have examples from all use types of meeting the 80% reduction and with most use types having examples of net-zero energy targets.

Key

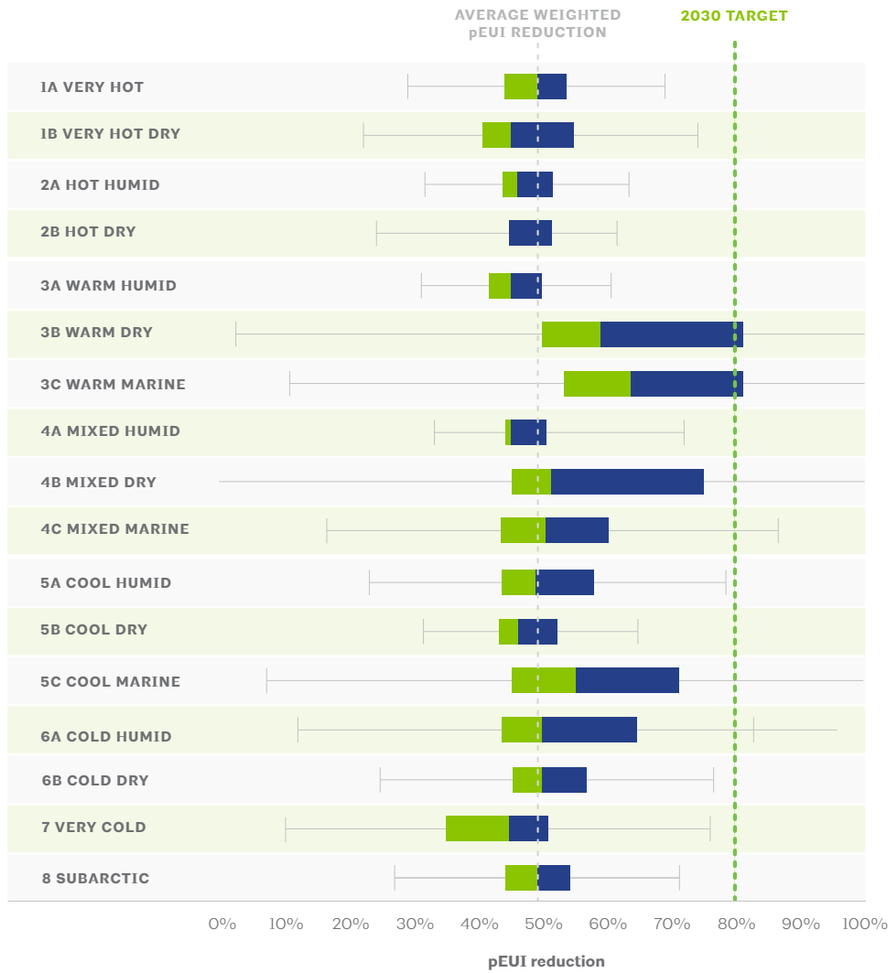


INTERIORS-ONLY PROJECTS BY USE TYPE



PEUI REDUCTION BY CLIMATE ZONE

IECC Climate Zone map



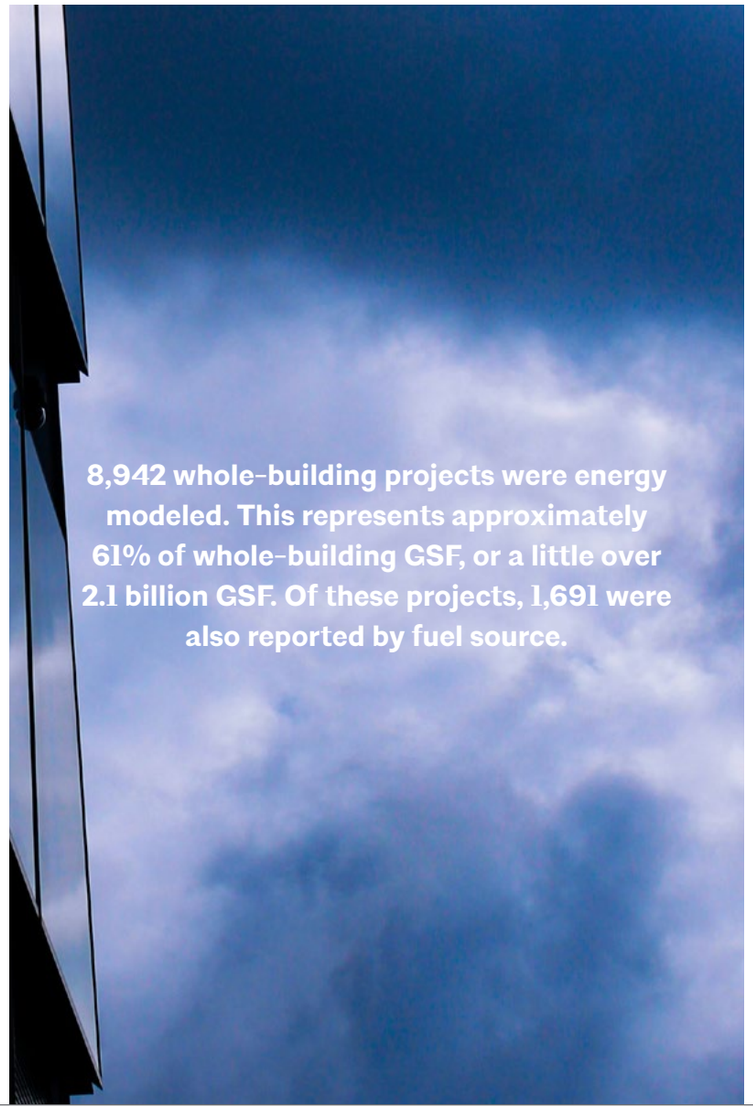
SECTION 2.

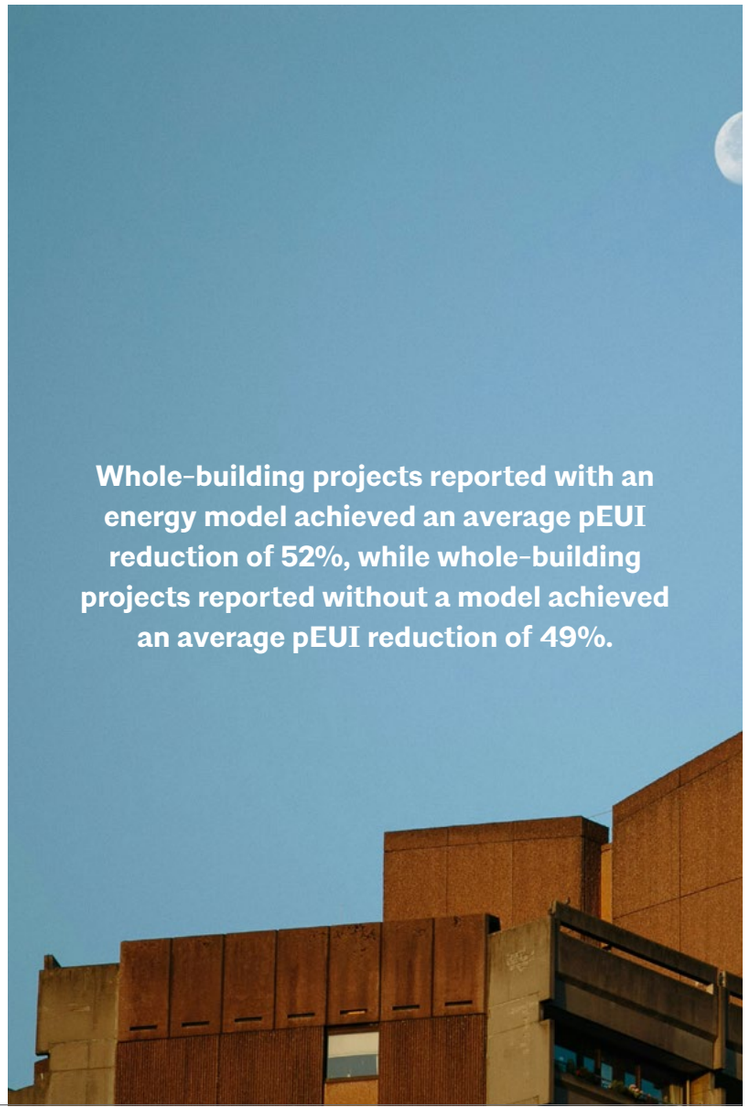
MODEL ENERGY USAGE ACROSS DESIGN PHASES

Photo by Alan Karchmer

2023 KEY TAKEAWAYS FOR PROJECTS REPORTING ENERGY MODELING

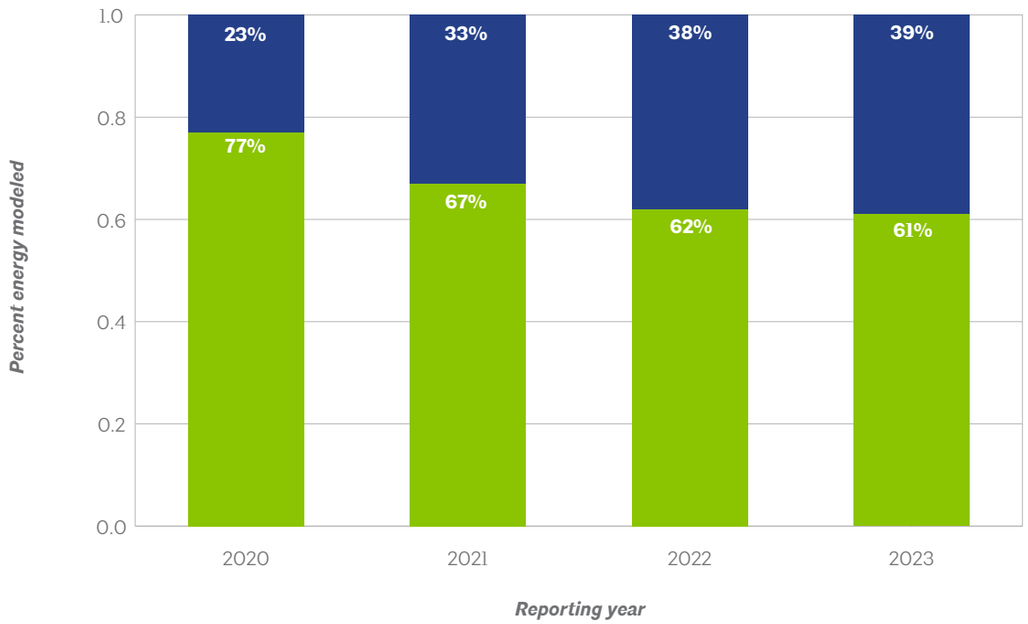
For most of the projects in the DDx, building according to their state's prescriptive energy code isn't enough to meet the 80% pEUI reduction target of the 2030 Commitment program: They need to energy model. Yet, the total reported whole-building gross square footage of projects that are energy modeled has been steadily decreasing the past several years. Several signatory firms cite cost as the reason for this decline. Energy modeling requires an upfront cost for clients, potentially causing some hesitation, particularly as recent reported architecture billings continue to soften. However, while there is an associated initial cost for energy modeling, the payback for integrating it into decision-making across the entire project creates higher value and cost-savings. From the very beginning of the design process, architects can speak to their clients about the benefits of high-performance design—drawing on data to make informed decisions creates high-performing buildings that are benefitting people, profit, and the planet.





Photos (from left to right): Scott Web on Unsplash; Joshua Sukoff on Unsplash

PERCENT OF WHOLE-BUILDING GSF WITH ENERGY MODELS



This reporting year, almost 9,000 whole-building projects were energy modeled. In the past four years, the reported whole-building gross square footage with energy model(s) has gone from 77% in 2020 to 61% in 2023. This consistent decrease parallels the architecture industry's decline in billings over the past year and a half. As investors prepare for potentially raised interest rates, clients are cutting costs and thinking more about short-term savings, which could have contributed to this energy modeling reduction.

Additionally, in recent years, the weighted average pEUI reduction across reported whole-building projects has been steadily hovering slightly below or above a 50% pEUI reduction. This pEUI reduction plateau corresponds with the steady decline in gross square footage reported with energy models. To achieve and show higher reductions, firms must further incorporate and report energy modeling and renewable energy into current projects and utilize lessons learned and strategies in future projects. Energy modeling is a powerful tool that informs design processes and empowers architects to make better data-driven decisions to ensure high-performance buildings.

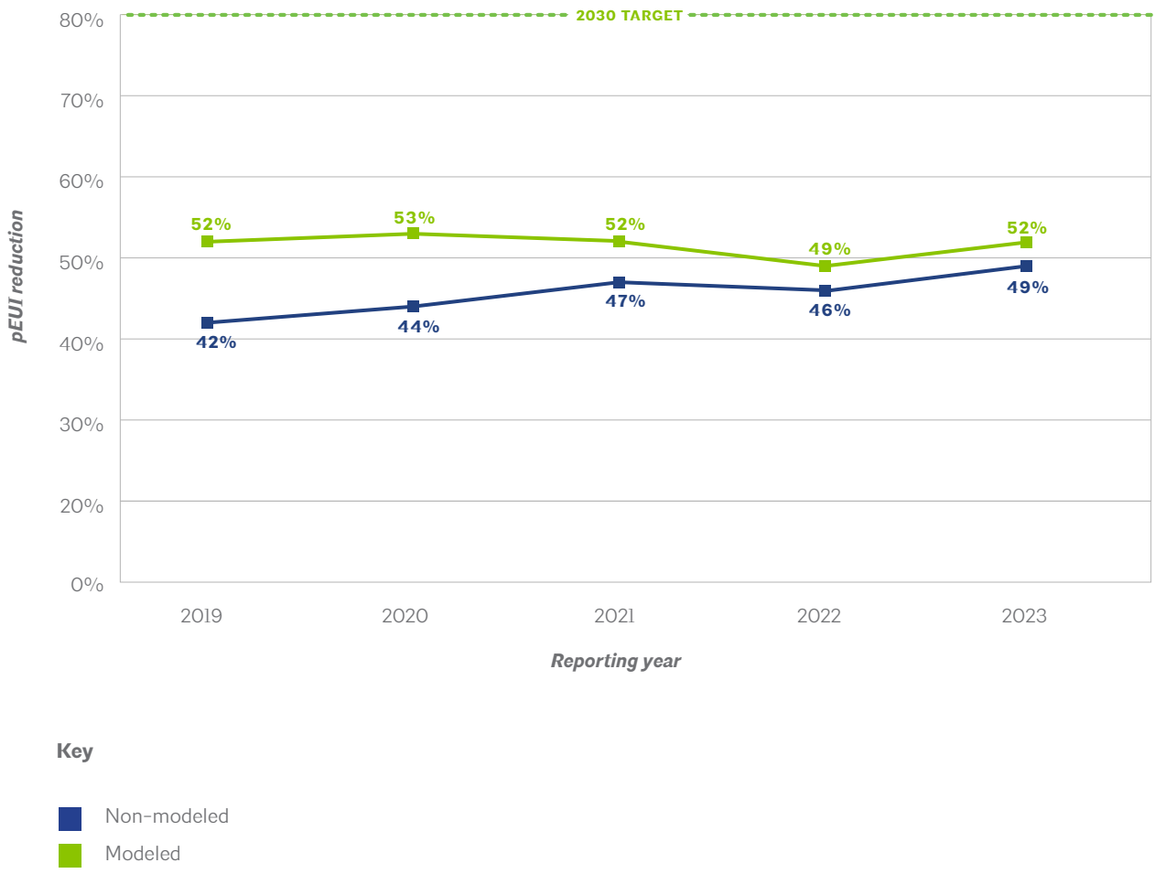
Key

- Non-modeled
- Modeled

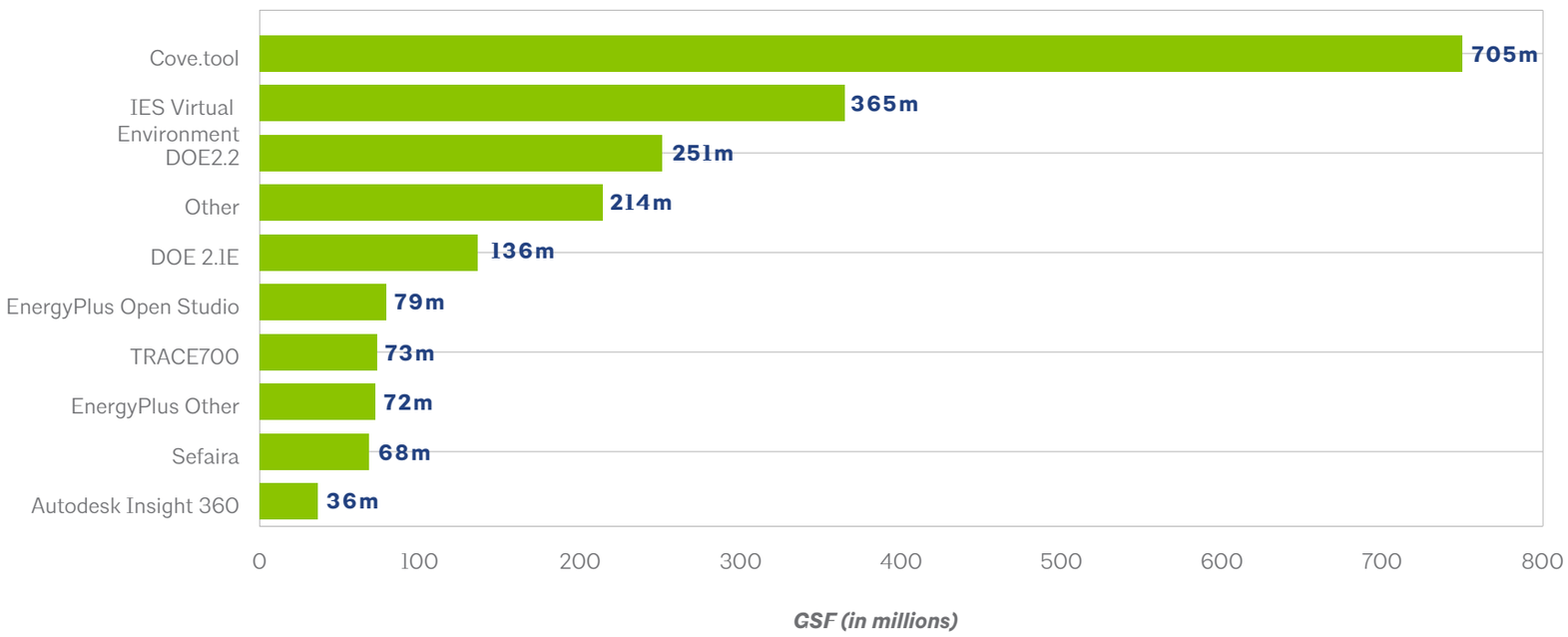
For projects reported with energy models in 2023, the plurality—38%—were modeled by the architecture firm, 29% by design engineer, 28% by a modeling consultant, and 5% by other parties. This is a sharp increase in modeling by the architecture firm, up from 10% last year. This jump in energy modeling by architects demonstrates what we already know—architects are the connectors between parties and clients, and by taking on this role in-house, they can more nimbly react to design changes. If modeling is done in earlier design phases, that information can have the most impact on design decisions.

The data have consistently shown that modeled projects perform with higher percentage pEUI reductions: This year, nonmodeled projects, driven by default code reductions, retained a 49% pEUI reduction versus a 52% pEUI reduction from modeled projects that are reflective of project design and decisions. This difference between nonmodeled and modeled projects has been shrinking; this year is the second time there was only a 3% difference in pEUI reduction compared to past years when there was up to a 6% difference. Higher-performing prescriptive energy codes are raising the bar for energy efficiency, and energy code prescriptive minimums have a profound impact on pEUI reduction. However, the overall pEUI reduction of reported projects to the 2030 Commitment continues to hit the 50% pEUI reduction plateau.

WHOLE-BUILDING PROJECTS MODELED VS NON-MODELED PEUI REDUCTION



TOP TEN ENERGY MODELING TOOLS BY WHOLE-BUILDING GSF



A common misconception of the 2030 Commitment is that energy modeling is required for reporting projects—it's not. However, in 2023, 426 of the 490 reporting firms reported at least one whole-building project that was energy modeled, and 115 of the 490 had their full whole-building project portfolios energy modeled, a notable increase to almost a quarter of total firms. As we approach 2030 and beyond, architects must ensure their firm culture utilizes data to inform client conversations, design decisions, and better outcomes for their entire portfolios.

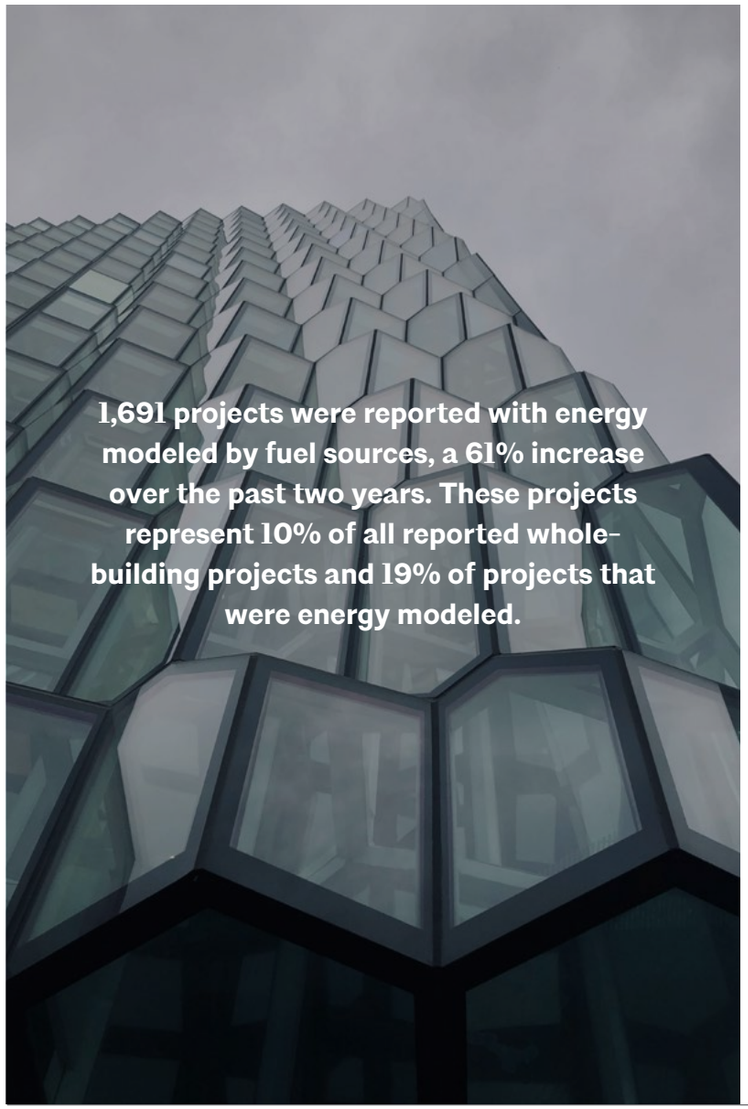
Resources

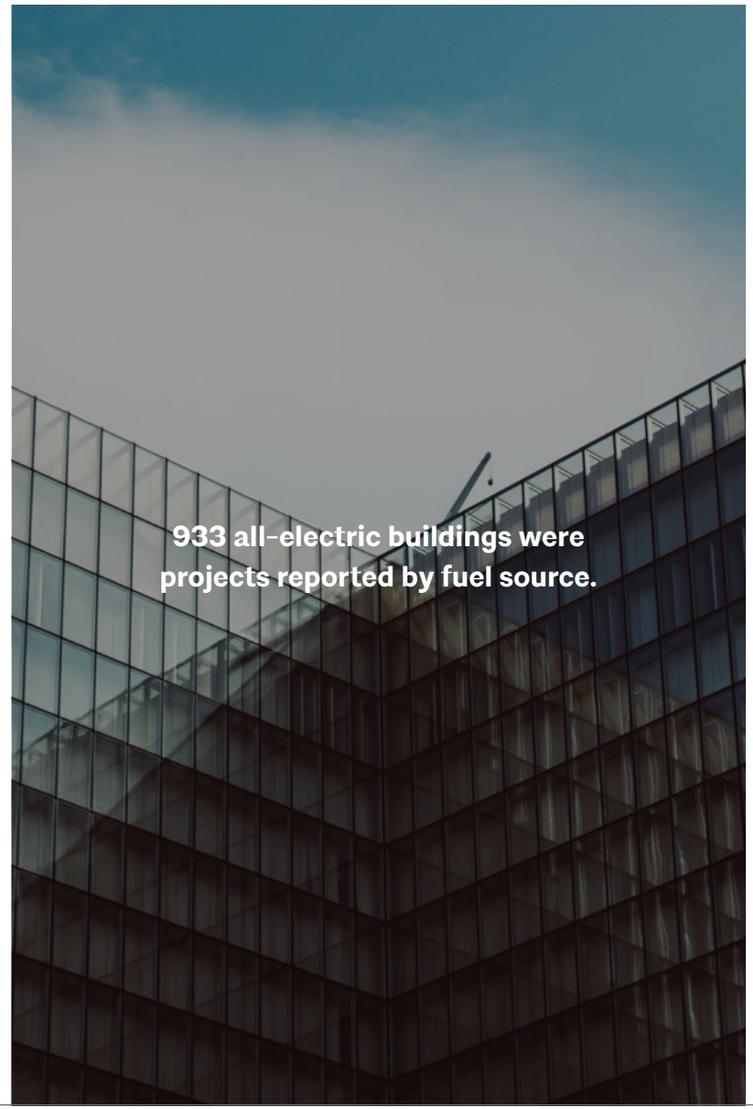
Architect's Guide to Building Performance
ROI of High-Performance Design

SECTION 3.

MOVE BEYOND FOSSIL FUELS THROUGH BUILDING ELECTRIFICATION

Photo by Iwan Baan

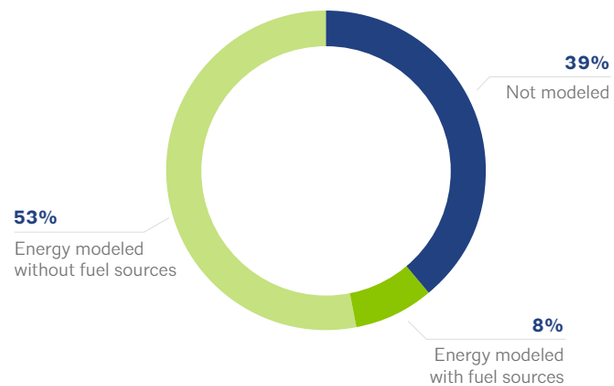




2023 KEY TAKEAWAYS FOR PROJECTS REPORTING FUEL SOURCES

The 2030 Commitment asks that signatory firms lead the industry in aiming to reach carbon -neutrality through drastic fossil fuel use reductions. To do this, two things must happen: buildings must electrify, and the U.S. grid must become cleaner.

1. Building electrification reduces reliance on fossil fuels and instead turns to electricity to power buildings. This tactic doesn't simply reduce carbon emissions; all-electric buildings provide healthier indoor and outdoor air for their occupants and community. Across the U.S., more than 125 cities and counties have adopted policies that require or encourage the move away from fossil fuels to all-electric homes and buildings. Furthermore, architects play an important role in supporting future electrification by better managing peak loads and grid capacity.



Photos (from left to right): Guillaume Galtier on Unsplash; Red Zeppelin on Unsplash

2. The Biden administration has set ambitious goals of 80% renewable energy generation by 2035 and 100% carbon-free electricity five years later, signaling political momentum to invest in a clean U.S. electric grid. In the first half of 2023, approximately 25% of electricity generated in the U.S. came from renewables, the highest percentage so far. However, building electrification and new energy infrastructure must dramatically accelerate to meet these goals.

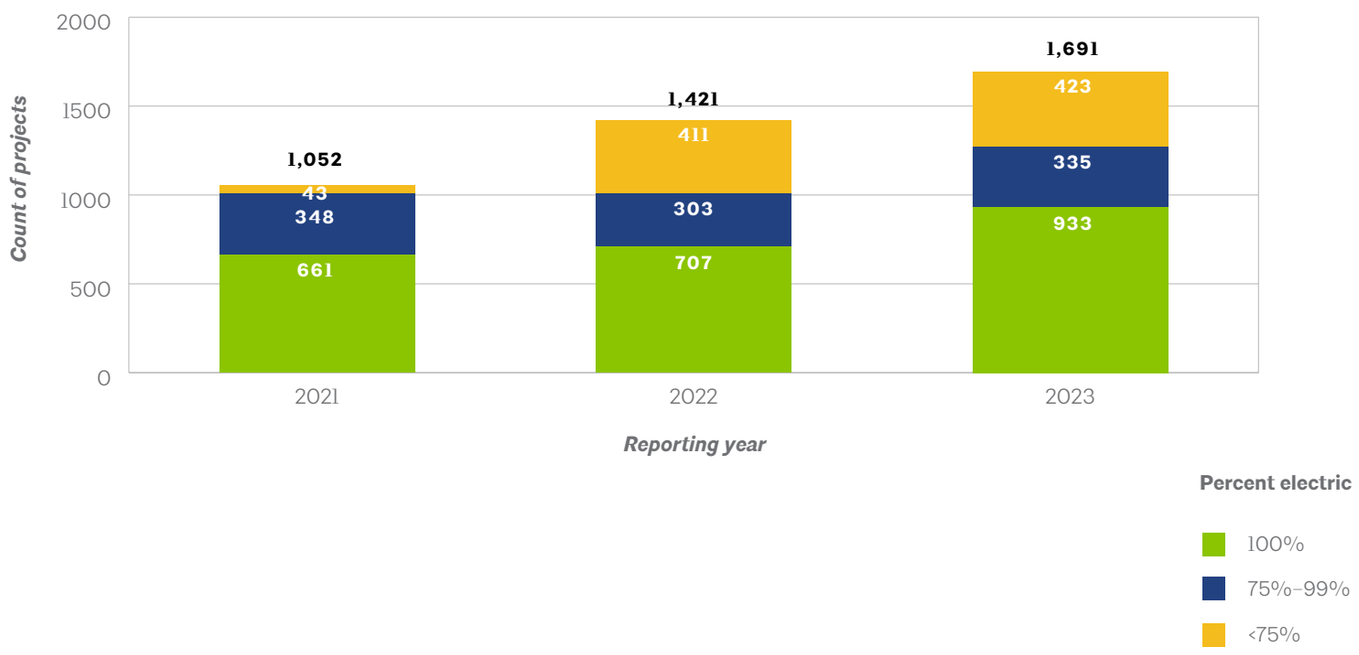
Within the 2030 community, reporting fuel sources in the DDx continues to increase since its inception in 2020. This year, 1,691 projects (10% of whole-building projects) were reported by fuel source in the DDx, totaling just over 276 million GSF. This is more than double the number in 2020, when only 669 projects were reported. Reporting by fuel sources offers deeper insight into your project—and your firm's overall progress toward carbon neutrality. The recently announced National Definition of a Zero Emissions Building's established criteria are the following: 1) energy efficient, 2) free of on-site GHG emissions from energy, and 3) powered solely from clean energy. In tracking all-electric buildings, firms must continue to report by fuel source so when the grid fully decarbonizes, all-electric buildings will in turn be zero-emissions buildings.

This year, there were 933 all-electric buildings, and another 335 projects were at least 75% electrified. Additionally, with this year's new updates to the DDx that calculate operational emissions for U.S.-based projects, more firms are realizing how all-electric buildings reduce their project's emissions. As 2030 signatory firms report more projects with fuel sources and more all-electric projects, they're signaling to the market the industry's commitment to reaching carbon neutrality.

Resources

EPA Power Profiler
Framework for Design Excellence: Design for Energy
The Building Electrification Technology Roadmap

PROJECTS REPORTED BY FUEL SOURCE



SECTION 4.

USE ON-SITE OR OFF-SITE RENEWABLE ENERGY

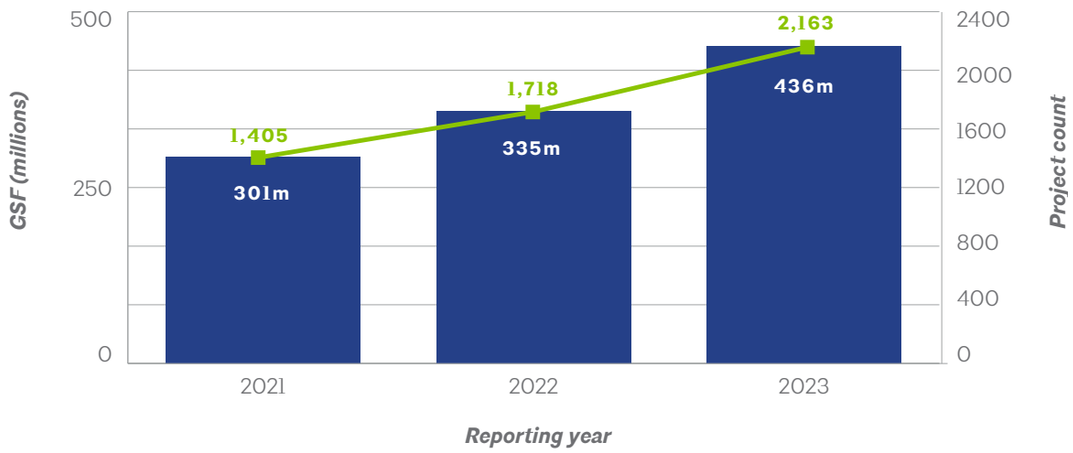
Photo by Chuen Wu, Patrick TIGHE Architecture

2023 KEY TAKEAWAYS FOR PROJECTS REPORTING RENEWABLE ENERGY

In June, the Biden administration announced the National Definition of Zero Emission Buildings with AIA's support. The AIA 2030 Commitment has been tracking its signatories' progress toward net zero carbon emissions since 2010. It is clear that a key way for firms to reach net zero within their portfolio is to incorporate renewable energy sources into their projects. Last year, the 2030 Commitment program aligned definitions with the IECC 2021 Zero Code. This work in the DDx established that renewable energy sources are included in a project's net pEUI: Dedicated off-site renewables will count as equal to on-site renewables in your net pEUI calculation, while unbundled RECs do not count toward off-site renewable contributions.

Photos (clockwise from top left): Appolinary Kalashnikova on Unsplash; Ashkan Forouzani on Unsplash; Pawel on Unsplash; American Public Power Association on Unsplash

PROJECTS REPORTED WITH RENEWABLE ENERGY (2021-2023)

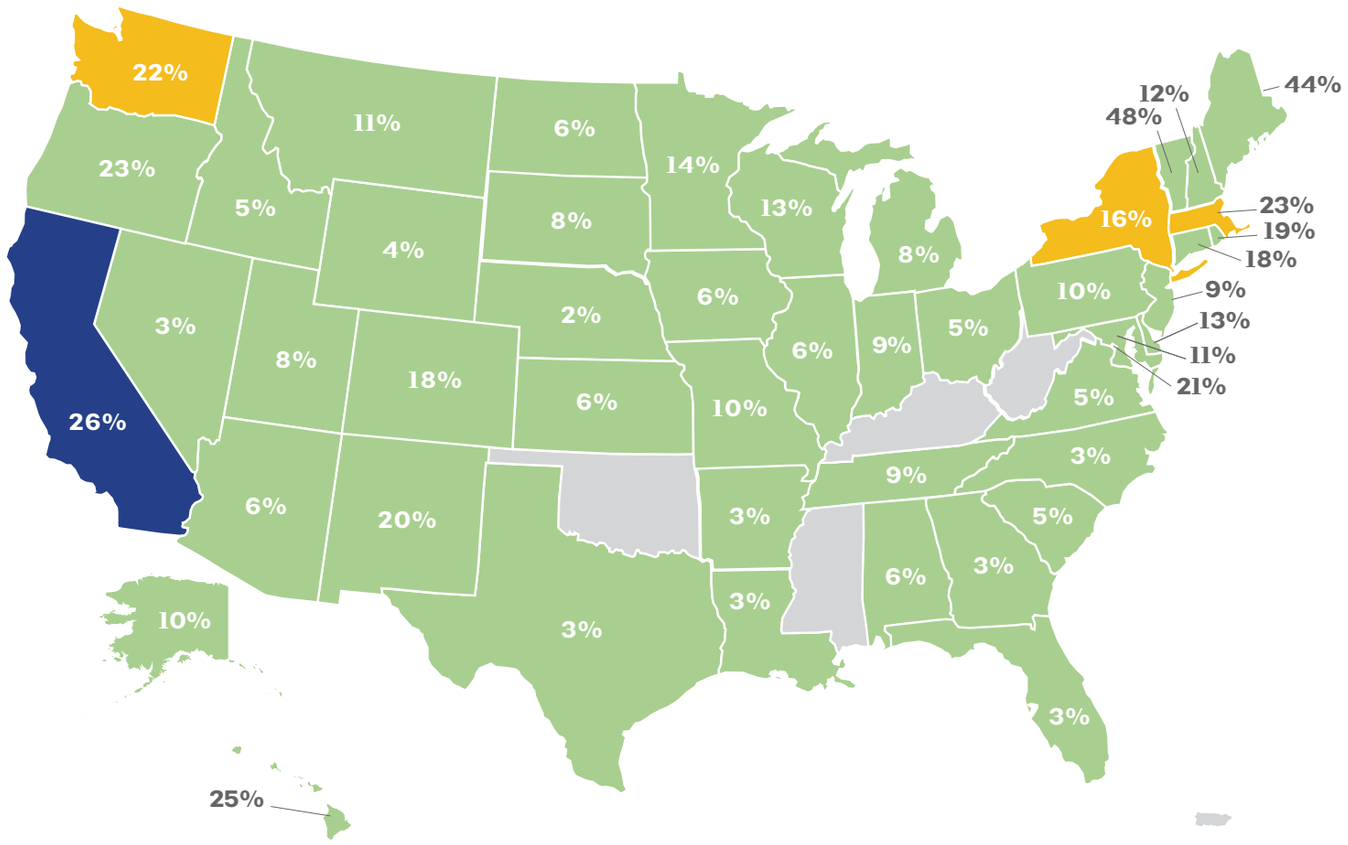


As they must do with building electrification, 2030 signatories must convey to clients the importance of renewable energy sources on a project-by-project basis. While there is no one "fix it" solution, using renewable energy sources is one of many ways to ensure the architecture and design industry meets the challenges of the climate and social crises. The entire world is grappling with how to accelerate the clean energy transition to meet the global temperature threshold to remain within 1.5°C of pre-industrial levels, and the A&D community is no different. Buildings contribute almost 40% of global CO_2 emissions, and according to the International Energy Agency, almost 2 trillion ft^2 of additional global building stock will come online by 2050. As building stock continues to grow, the 2030 Commitment is tracking how these projects contribute to reducing CO_2 emissions and mitigating the impacts of the climate crisis.

Key

- Project count
- GSF

PERCENTAGE OF TOTAL PROJECTS WITH RENEWABLE ENERGY BY U.S. STATE



Number of projects

- 1–99
- 100–199
- 200–499
- 500+

In 2023, 2,169 projects—or approximately 9% of projects representing almost 436 million GSF—reported using renewable energy. This continues the trend of annual increases in the percentage of reported projects in the DDx that include renewable energy. Photovoltaics continues to have an enormous lead, with 1,915 of the 2,169 projects reporting PV sources. Multifamily residential is the most reported use type, with 594 reported projects with renewable energy sources. Additionally, this year, we are publishing the U.S. map of reported projects with renewable energy to demonstrate the power of local and state policy in governing green building incentives. Unsurprisingly, the states that are prioritizing the clean energy transition are also the states with the greatest number of projects with renewable energy. Architects can have an active role in advocating for clean energy to their civic leaders at the local and state level—learn more about how to engage in these issues and champion a renewable energy-driven built environment.

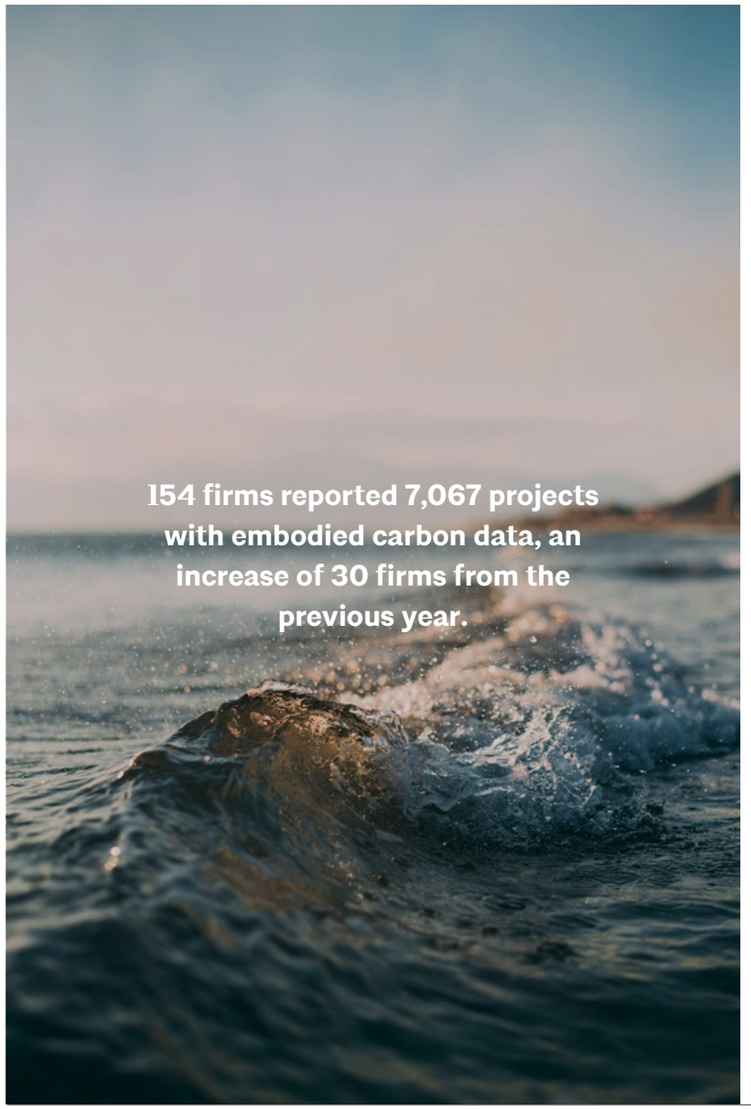
Resources

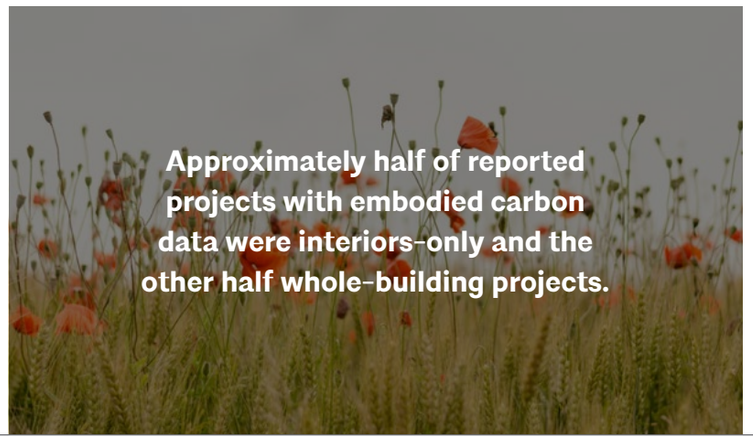
Architect's Primer on Renewable Energy
ROI of High-Performance Design: Reducing upfront costs
Zero Code 2.0
Why did renewables become so cheap so fast?

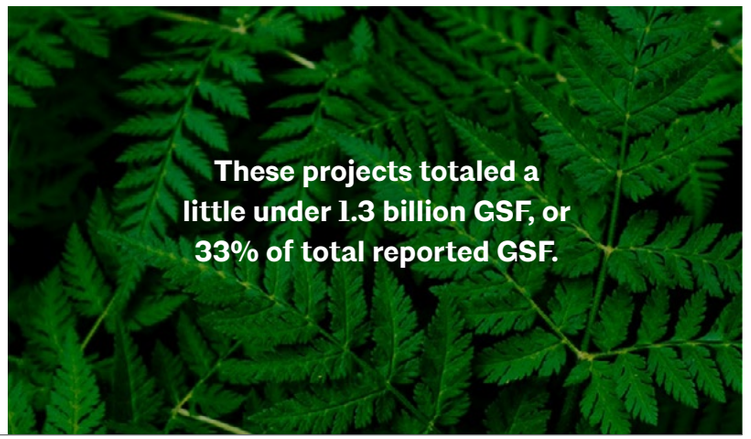
SECTION 5.

TRACK AND IMPROVE THE EMBODIED CARBON OF BUILDINGS

Photo by Lara Swimmer





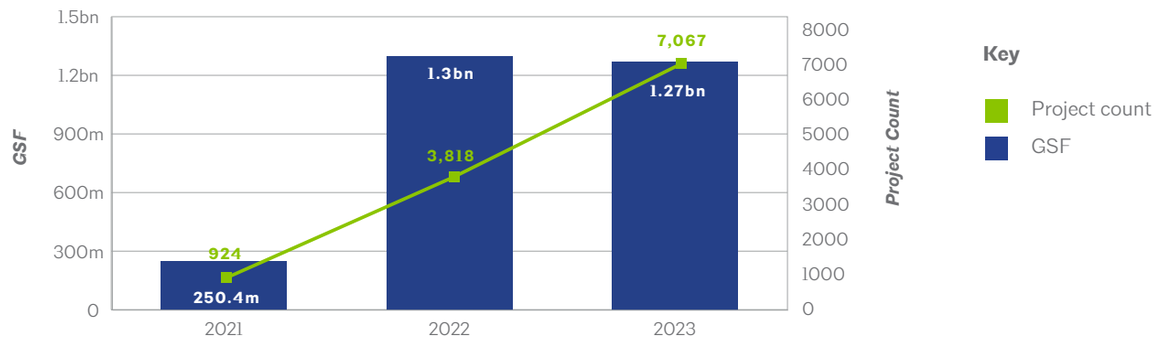


2023 KEY TAKEAWAYS FOR PROJECTS REPORTING EMBODIED CARBON

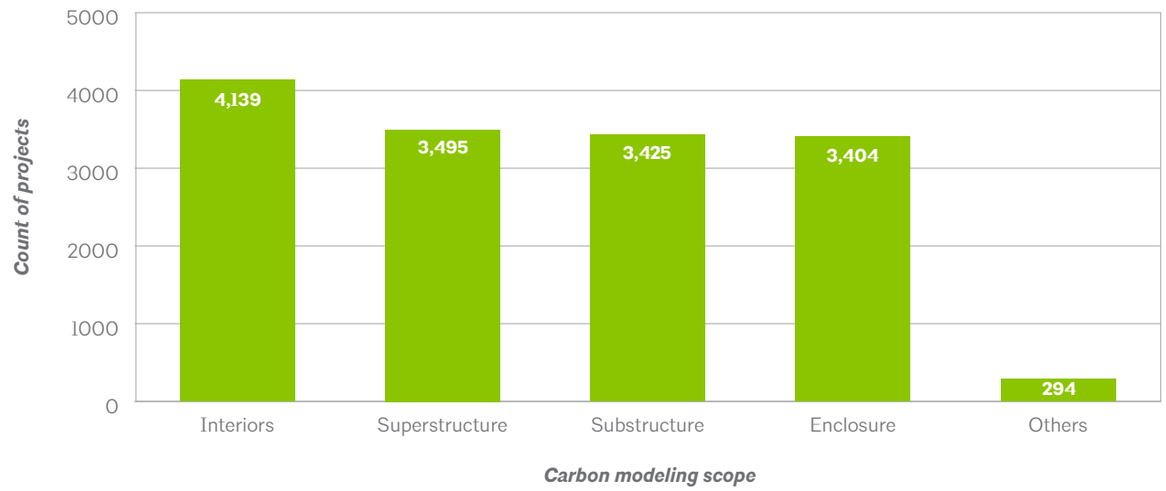
Total carbon continues to be the industry's sticking point—and opportunity to make a tremendous impact on carbon emissions. Tracking both the operational and embodied carbon of buildings is challenging but critical to understanding where the industry is at—and where it needs to improve to achieve the greatest climate mitigation results. Education, technology, and policy change is emerging as a three-pronged approach for architects—and the broader AEC industry—to improve both the quantity and quality of embodied carbon data.

Photos (clockwise from top left): Iva Rajovic on Unsplash; Jude Infantini on Unsplash; Pawel on Unsplash; Hannes Egler on Unsplash

PROJECTS REPORTED WITH EMBODIED CARBON

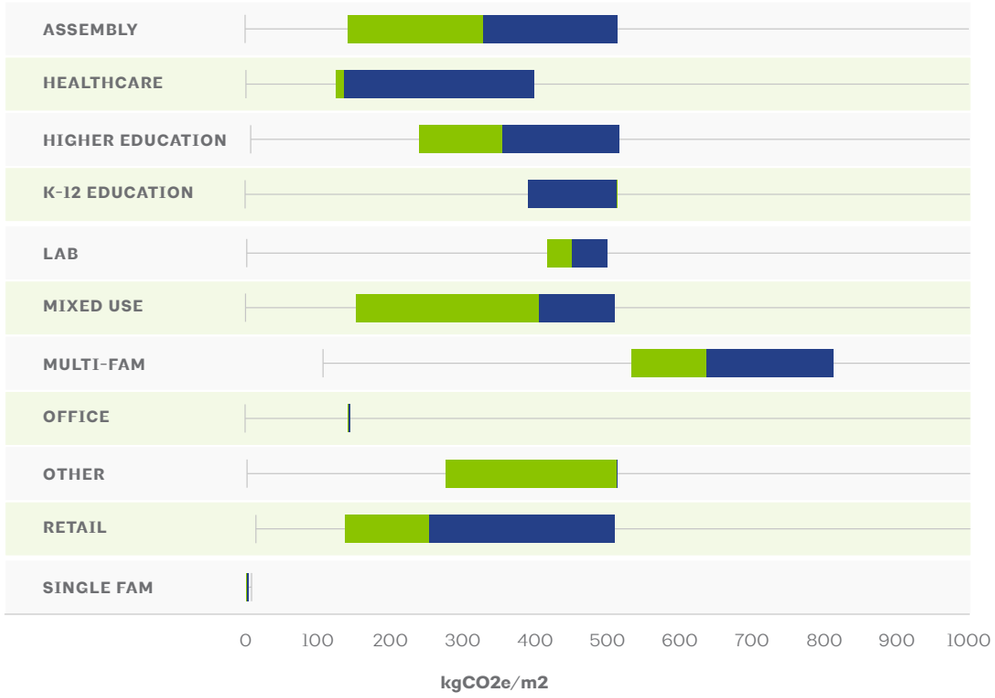


PROJECTS REPORTED EMBODIED CARBON BY SCOPE



In 2023, the 2030 Commitment witnessed another rapid increase in reported projects with embodied carbon data—to 154 firms reporting 7,067 projects. These projects represent approximately one-third of the total reported gross square footage reported in the DDx for this reporting year. While the number of firms represents about 31% of total reporting firms, it's notable that in 2020, only 55 firms reported embodied carbon, totaling 293 projects. Like the industry, 2030 Commitment signatories are continuing to learn how to integrate embodied carbon tracking into their design process—and then, how to utilize this data in their decision-making. This was the first year in which interiors-only and whole-building projects were almost equally represented in total project count for embodied carbon data. Additionally, 75% of projects were new construction projects and 25% were major renovations of existing buildings. This high percentage of major renovation projects with embodied carbon data may demonstrate that more firms are realizing the outsized potential of building reuse in reducing whole-building carbon emissions.

REPORTED EMBODIED CARBON INTENSITY BY USE TYPE IN $kgCO_2e/m2$



While a lot of the tracked predicted energy data for the 2030 Commitment is focused on whole-building projects, embodied carbon is at that intersection for interiors and whole-building projects, with materials selection playing a more important role in reducing the embodied carbon of a building and, thus, total carbon. As the 2030 Commitment continues to track emissions with the goal of reaching net zero, AIA's A&D Materials Pledge program is tracking the industry's progress toward a holistic materials specification benefiting the people and the planet. Both programs reinforce a guiding principle: Embodied carbon must be a lens through which architects are assessing the whole-life impact of buildings, not just a retrospective practice. 154 firms are embodying this principle in each of their 7,067 projects reported with embodied carbon data this past year.

NUMBER OF PROJECTS REPORTED BY EMBODIED CARBON CALCULATION TOOL

Tool	2021	2022	2023
Tally	195	278	5,655
Build Carbon Neutral	317	398	382
EPIC Tool	-	-	296
OneClick	63	114	268
Other	136	2,940	247
cove.tool	-	-	41
CARE Tool	-	-	40
BEAM	-	-	33
EC3	200	48	29
Athena	12	34	26
TallyCAT	-	-	22
TallyLCA	-	-	12
ECOM	-	-	8
eTool	1	6	6
Autodesk Insight	-	-	2
Total	**924**	**3,818**	**7,067**

Resources

AIA-CLF Embodied Carbon Toolkit for Architects
Renovate, Retrofit, Reuse
ROI: Designing for reduced embodied carbon
SE2050 Design Guidance for Reducing Embodied Carbon in Structural Systems

SECTION 6.

CASE STUDIES

Photo by Michael Moran

FFA ARCHITECTURE AND INTERIORS INC.

Founded in 1956, FFA Architecture and Interiors Inc. is a medium-sized firm based in Portland, Oregon, whose core principles are sustainability and equity. That work begins before they speak with clients or draw up floor plans. Producing good design that is beautiful and sustainable and contributes to a more equitable built environment begins with the firm culture. Being an AIA 2030 signatory has furthered FFA's central mission of sustainability. FFA signed onto the AIA 2030 Commitment in 2017 and began reporting data into the DDx for the reporting year 2018. "Sustainability as the basis of good design is something that we speak about, and [the 2030 Commitment] is a pathway of defining what that looks like in a more tangible way," says Andrew Loia, project architect and sustainability lead at FFA.

The creation of FFA's Sustainability Action Plan (SAP) has been critical in demonstrating how being a 2030 signatory has changed FFA's work. Before becoming a 2030 signatory and creating the SAP, the firm undertook sustainability efforts, both on a project basis and within firm culture. This included a sustainability committee that worked on office operations, firmwide education, and honors and award proposals. However, the process of creating and implementing the firm's SAP has helped organize these efforts. FFA's SAP now includes a process for each design phase emphasizing energy modeling, the 2030 Commitment, and embodied carbon, which is a "new frontier we want to develop our capabilities in," according to Loia. By setting goals, creating frameworks, and offering guidance, FFA's SAP is a living catalogue of what the firm is accomplishing—and what more they aim to do. "We continually review our process and define—and redefine—how we want to approach sustainability, not just from an energy standpoint but across all aspects of both firm culture and design outcomes," explains Loia.

Sustainability and firm culture go hand in hand for FFA, starting with the hiring process. Edward W. Running, AIA, LEED BD+C, a partner at FFA, affirms that sustainability knowledge and passion is high on the list as they review prospective candidates. "If they're really excited about [sustainability], they may go an extra mile to sort of figure out something in a new or innovative way that really contributes to a better building or a better place. It also creates a more holistic approach to design," Running notes. The firm's focus on sustainability affected Loia's own hiring. "The SAP that FFA has published on the website was a huge attractor for me, knowing that FFA's values were aligned with what I was hoping to get in my professional experience and where I wanted to contribute my efforts."

A big part of the AIA 2030 Commitment focuses on the predicted design data that is input into the DDx. While that is a key component of the program, it's not the only one. A firm can't improve what it isn't tracking, and that applies to firmwide goals that are not just related to DDx data. FFA is a leading example of how a firm successfully integrates its goals and frameworks from its SAP into the firm culture and how that ultimately produces good design.

Photo by Christian Columbres

KAPLAN THOMPSON ARCHITECTS

Kaplan Thompson Architects, a medium sized firm based in Portland, Maine, fosters a community of support and adaptability. A signatory since 2010, their commitment to sustainability is beyond DDx reporting—it's shaped firm culture and prioritized high-performance design.

RY23 will be Kaplan Thompson Architect's sixth year of meeting 2030 Challenge pEUI reduction target and reported energy models for their entire portfolio for RY23. These achievements are a result of steps to engrain sustainability and equity into operations, team building, and design processes. Like others, their reporting process has evolved from having a single person to a small group collaboratively collecting the data. This embodies a core tenet of 2030: understanding what has led to a firm's successes—and what is still a barrier—is the way to achieve further progress.

A success has been creating an in-house Sustainability position. Kai Fast, CPHC, joined the firm in 2018 as a project designer. Kai showed interest and expertise in energy modeling, so the firm leadership transformed their role to be sustainability-specific and to lead the company's 2030 Commitment efforts. The creation of this largely non-billable position is less common for smaller firms, but one that "makes us unique. It was a conscious choice to put the right person in that role and build a team and workflow around them," notes Adrienne Stauffer, Principal and Director of Operations and Marketing.

Kai's role additionally includes analyzing and communicating data to the wider firm, ensuring data-driven design decisions. This includes establishing a firm-specific "2030 By the Numbers" report, creating project grading sheets to show what's working and what needs improvement, and establishing workflows for carbon accounting and future reductions. "I credit firm's leadership for having flexibility in creating this role. Not all firms necessarily have Principals who allow for their staff to have a career path that best suits their professional development," they acknowledge.

The data collection Kai does have been instrumental in advocating for the design decisions that KTA makes. It's effective at convincing clients that sustainable design is financially feasible and good for the triple bottom line. The position is also influential in winning projects where RFPs have stated sustainability goals.

A piece of advice for firms who are either starting out or those who are re-engaging is "to identify a champion who's passionate and give them the support they need to do the work," gives Stauffer. Instilled in KTA is a commitment to sustainability and to continually track and achieve progress. As a high-performance firm, this produces a mission-driven firm culture and good design outcomes.

Photo by Irvin Serrano

SECTION 7.

CONCLUSION

Photo by Keith Isaacs

CONCLUSION

Architecture and design firms are taking steps to ensure that their firm culture prioritizes climate action. By integrating energy modeling into the design process, tracking fuel sources, electrifying their projects, utilizing renewable energy, and reducing embodied carbon, 2030 signatories are leading the way. The AIA 2030 Commitment is a longstanding program that reinforces the importance of and enables architects to track their progress in designing high-performance buildings. This year's annual 2030 By the Numbers report is a testament to the communal power of architects and designers to make a difference.

NEXT STEPS

The AIA 2030 Commitment is growing and evolving. We're excited to continue to expand the DDx to store and analyze design data for better decision-making at each step of every project. Upcoming DDx updates will include:

- A new feature to allow architecture firms to share ownership of projects with collaborating firms
- Connecting the platform to ENERGY STAR Portfolio Manager to integrate actual post-occupancy data and compare that with predicted energy data
- ECHO alignment with the collection of embodied carbon data according to a shared reporting framework across the AEC industry

Through 2030 and DDx as well as the A&D Materials Pledge's first year of reporting, AIA is equipping its members and their firms with the knowledge, tools, and community to make positive change in their projects and communities.

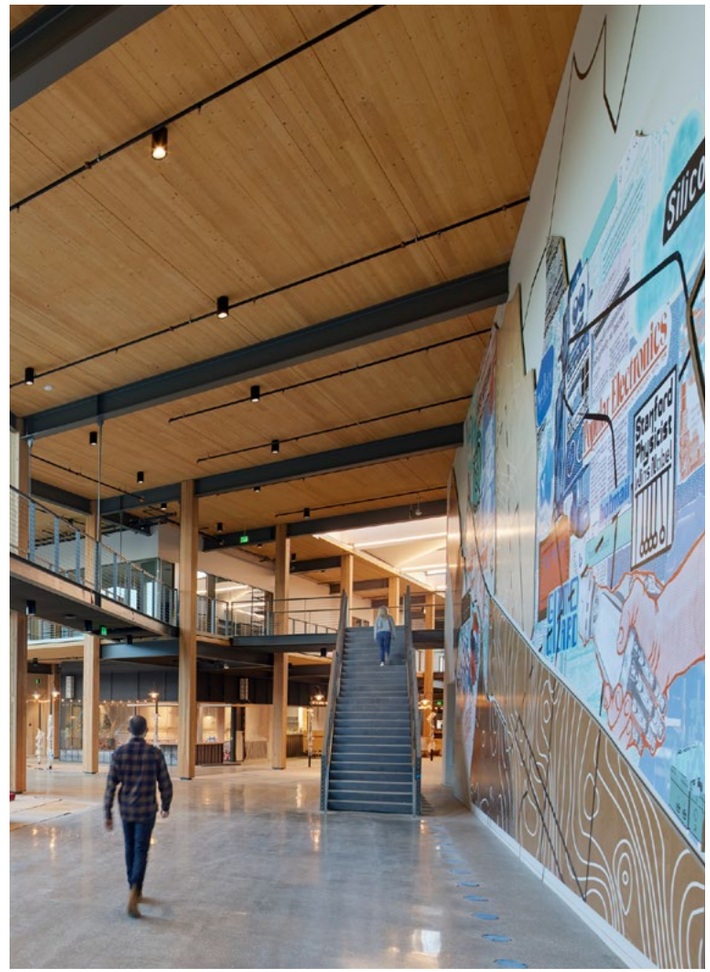
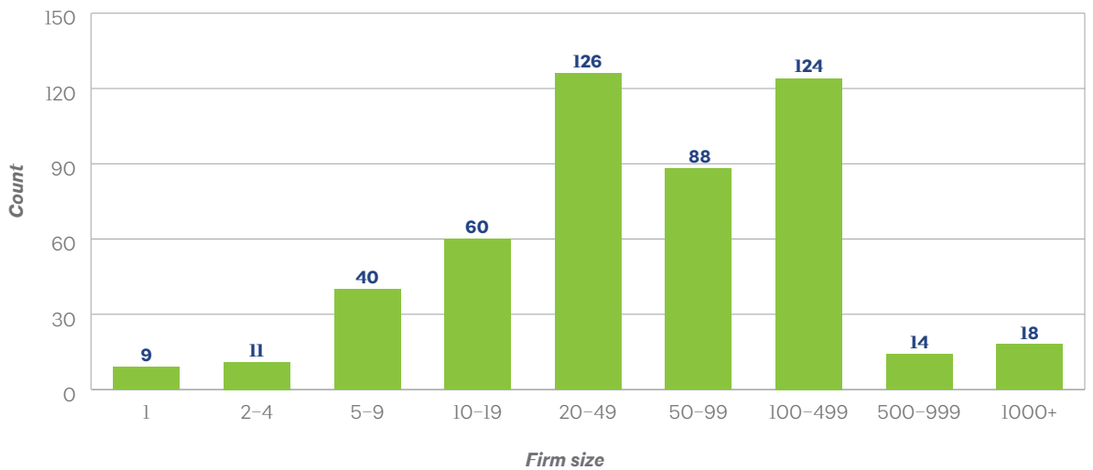


Photo by Bruce Damonte Photography

REPORTING SIGNATORIES

NUMBER OF FIRMS REPORTING BY FIRM SIZE



REPORTING SIGNATORIES

31 signatories met the 80% pEUI reduction target across their entire portfolio highlighted in green.

AC Martin
Access Architecture
Adrian Smith + Gordon Gill Architecture
Alchemy Architects
Allied8 Architects
Alliiance
Alterstudio Architecture LLP
Amenta Emma Architects
Anderson Brulé Architects
Anderson Mason Dale Architects
Ankrom Moisan Architects, Inc.
Ann Beha Architects
Antunovich Associates
ARC/Architectural Resources Cambridge
Archıı Inc
archimania
Architects FORA
Architects Hawaii Limited
Architectural Nexus, Inc.
Architectural Resources Group
Architekton
Arcturis
Arkin Tilt Architects
Arrowstreet
Arshia Architects, ltd
Assembledge+
Assembly OSM
Atelier Ten
Atkin Olshin Schade Architects
Ayers Saint Gross
Backen & Backen Architects
Bailey Edward
Bala Consulting Engineers
Ballinger
BAR Architects & Interiors
Barley|Pfeiffer Architecture
Bassetti Architects
Becker + Becker
Behnisch Architekten
Bergmeyer
Beyer Blinder Belle Architects & Planners, LLP
BHA PLLC
BIG - Bjarke Ingels Group
bKL Architecture LLC
BKSK Architects
Blackney Hayes Architects

REPORTING SIGNATORIES

BNIM Architects
Board & Vellum
Bohlin Cywinski Jackson
Bora Architecture & Interiors
Boulder Associates, Inc.
BranchPattern, Inc.
BRAVE/architecture
BRIBURN
BRIC Architecture
Brooks + Scarpa Architects, Inc.
Browning Day
Bruner/Cott & Associates
Burgeoning Architects
BuroHappold Engineering
BVH Architecture
BWBR
BWS Architects
CallisonRTKL
CambridgeSeven
Cannon Design
Canopy Architecture + Design
Carleton Hart Architecture
CarrierJohnson+Culture
CAW Architects
CBT Architects
CCY Architects
Centerbrook Architects and Planners
Charlap Hyman & Herrero
Charles Cunniffe Architects
CICADA Architecture/Planning
Clark Nexsen
Clayco / LJC
CMTA, Inc.
CO Architects
coLAB studio, llc
COOKFOX Architects
Cooper Carry
Corgan
Cornerstone Architecture Incorporated
Coscia Moos Architecture
COULSON
CPL Architects and Engineers
CS&P
Cuningham Group Architecture, Inc.
Curtis + Ginsberg Architects LLP
Cushing Terrell
Dake Wells Architecture
Dake Wilson Architects
Darin Johnstone Architects
Dattner Architects
David Baker Architects
Davis Partnership Architects
Dekker Perich Sabatini
DELV Design
DES Architects + Engineers
Design Collective, Inc.
Dewberry
DIALOG
DIGSAU
DiMella Shaffer
Dimension IV - Madison, LLC
DLR Group
DNM Architecture Inc.
DRAW Architecture + Urban Design
DREAM Collaborative
DS Architecture
DSGN Associates, Inc.
DSK Architects + Planners
dSPACE Studio
Duda Paine Architects
Duvall Decker Architects, P.A.
DWL Architects + Planners, Inc
Eckenhoff Saunders Architects
EDA
EHDD
Ehrlich Yanai Rhee Chaney Architects
El Dorado
Elkus Manfredi Architects
Ellenzweig
ELS Architecture and Urban Design
emersion DESIGN
Engberg Anderson Architects
English + Associates Architects, Inc
Ennead Architects
EOA Architects
Epstein
ERA / Eric Rothfeder Architect
ESa
ESG Architecture and Design
Eskew+Dumez+Ripple
EUA
Ewers Architecture
EwingCole
EXP
Farr Associates
FCA
Feldman Architecture
Fennick McCredie Architecture
Fentress Architects
FFA Architecture and Interiors, Inc.
FGM Architects
Field Paoli Architects
FIFTEEN Architecture + Design
Flad Architects

REPORTING SIGNATORIES

Fleischman Garcia Maslowski Architecture
Forge Craft Architecture + Design
Fox Architects
Frederick + Frederick Architects
Freeman French Freeman
Furman + Keil Architects
FXCollaborative LLP
gbA Architecture & Planning
GBBN
GBD Architects Incorporated
Gensler
GFF
GGA+
GGLO
Glumac, A Tetra Tech Company
Goettsch Partners
Goody Clancy
Green Hammer
Gresham Smith
Grimm and Parker
Grimshaw
Group 4 Architecture, Research + Planning, Inc.
Gruen Associates
Guidon Design
GWWO Architects
Hacker
Hanbury
Handel Architects, LLP
Hargis Engineers, Inc.
Harley Ellis Devereaux (HED)
Harriman Architects + Engineers
HarrisonKornberg Architects
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Hartshorne Plunkard Architecture
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hb+a Architects
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ICON Architecture, Inc.
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Integrus Architecture
INVISION
isgenuity
Jacobs
JAHN
Jensen Architects
Jer Greene, AIA + CPHC
JGMA
JLG Architects
JNS Architecture + Interior Design
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John Wyka Architecture
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Juniper Design + Build
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Lemay
Leo A Daly
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LGA Architecture
LHB, Inc.
Lionakis
Little Diversified Architectural Consulting
LMN Architects
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LPA, Inc.
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Mackey Mitchell Architects
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MASS Design Group
Mathes Brierre Architects
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MG2
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MRV Architects
MSR Design
Muller & Muller, LTD.
Multistudio
Murdock Solon Architects
MWA Architects
NAC Architecture
Nano LLC
National Community Renaissance
NBBJ
NCA Studio Inc.
Nelsen Partners
Neumann Monson Architects
Newman Architects
Nicholas Jay Architect
Noll & Tam Architects
NORR
Nurture
Oak Point Associates
OFFICEUNTITLED
OKW Architects, LLC
Olson Kundig
Omgivning
Onion Flats Architecture
OPAL
OPN Architects
Opsis Architecture
ORA
Orcutt | Winslow
Ordiz-Melby, Architects
Otak, Inc
Overland Partners Architects
OZ Architecture
Page
Pappageorge Haymes Partners
Parkhill
Patriquin Architects
ParkFowler Plus
Paul Murdoch
Paul Poirier + Associates Architects
Paulett Taggart Architects
Payette
PBDW Architects
PCA, Inc
Pei Cobb Freed & Partners Architects LLP
Pelli Clarke & Partners
Perkins Eastman
Perkins&Will
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Placework
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practis
Precipitate, PLLC
Progressive AE

REPORTING SIGNATORIES

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Pure Architects
Pyatok Architecture + Urban Design
Quattrocchi Kwok Architects
Quinn Evans Architects
Ratcliff
RATIO Design
RB+B Architects, Inc.
RDG Planning & Design
Re:Vision Architecture
Regenerative Building Solutions
Retail Design Collaborative & Studio One Eleven
RINKA
RMW architecture & interiors
RNT Architects
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Salazar Architect Inc.
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SEA
Searl Lamaster Howe Architects
Selldorf Architects
SERA Architects
SGA
SHAFER CROWE KUECK | Architecture + Design LLC
Shears Adkins Rockmore Architects
Sheehan Nagle Hartray Architects
Shepley Bulfinch
Shive-Hattery
SHP
Siegel & Strain Architects
Sillman Wright Architects
SLATTERY
Smith Gee Studio
Smith Seckman Reid, Inc.
SmithGroup
Smith-Miller + Hawkinson Architects
SMMA
SMNG A Ltd.
SMP Architects
SMRT
Snow Kreilich Architects
Sol design + consulting
Solomon Cordwell Buenz
SOM (Skidmore Owings & Merrill)
SopherSparn Architects, LLC
SRG Partnership, Inc.
SSOE, Inc.
Standard Architecture | Design
Stantec Architecture
Steinberg Hart
STG Design
Studio Completiva
Studio Gang Architects
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Studio Nigro Architecture + Designd
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STUDIOS architecture
Substance Architecture
SWBR
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TBDA
TCA Architects
TCA Architecture + Planning, Inc.
TCF Architecture
TEF Design
TenBerke
The Arkitex Studio Inc
The Beck Group
The Green Engineer, Inc.
The Miller Hull Partnership
The Sheward Partnership
The SLAM Collaborative
Thornton Tomasetti
Tilton, Kelly + Bell, L.L.C.
TLC Engineering Solutions
TLCD Architecture
Todd Jersey Architecture
Tower Pinkster Titus Associates Inc
Trahan Architects
TreanorHL
TRIA, Inc.
Trivers Associates
TruexCullins
TVA Architects, Inc.
tvsdesign
Urban Design Perspectives
UrbanWorks, Ltd.
Utile
Valerio Dewalt Train Associates
Van Meter Williams Pollack LLP
Vanderweil Engineers
VIA design architects

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Vinci/Hamp Architects Inc.
VMDO Architects
Voith and Mactavish Architects
Ware Malcomb
Warrenstreet Architects, Inc.
WBRC Architects/Engineers
WDG Architecture
Weber Murphy Fox
Weber Thompson
Weese Langley Weese Architects Ltd.
Wendel
West Work
Wheeler Kearns Architects
Wight & Company
William Rawn Associates
WJW Architects
Woodhouse Tinucci Architects
Woods + Dangaran
Woods Bagot
Workbench
Works Progress Architecture
Wright Heerema Architects
WRNS Studio
WRT
WXY architecture + urban design
Y.A. studio
ZeroEnergy Design
ZGF Architects LLP
Ziger|Snead A

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For more information and resources,
visit *aia.org/2030Commitment*.

PROJECT IMAGE CREDITS

Cover
The Tom and Ruth Harkin Center at Drake University
Architect: BNIM
Photo credit: Kelly Callewaert
72% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page vi
Thurston Hall Renovation
Architect: VMDO Architects
Photo credit: Alan Karchmer
62% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

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Hayward Library & Community Learning Center
Architect: Noll & Tam Architects
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118% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

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Alice West Fleet Elementary School
Architect: VMDO Architects
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98% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page 21
The Ellen DeGeneres Campus of the Dian Fossey Gorilla Fund
Architect: MASS Design Group
Photo credit: Iwan Baan
92% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page 24
Pacific Landing Affordable Housing
Architect: Patrick TIghe Architecture
Photo credit: Chuen Wu, Patrick TIGHE Architecture
129% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page 28
PAE Living Building
Architect: ZGF Architects
Photo credit: Lara Swimmer
99% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page 33
MASS MoCA Building 6
Architect: Bruner/Cott Architects
Photo credit: © Michael Moran
80% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

Page 34
Chemeketa Ag complex Interior
Architect: FFA Architecture + Interiors
Photo credit: Christian Columbres
FFA Architecture + Interiors served as a firm case study for the 2030 By the Numbers (RY23) report.

Page 35
Blackwood House
Architect: Kaplan Thompson Architects
Photo credit: Irvin Serrano
Kaplan Thompson Architects served as a firm case study for the 2030 By the Numbers (RY23) report.

Page 36
USG Biomedical Sciences & Engineering Education Building
Architect: BCooper Carry and Lake|Flato Architects
Photo credit: Keith Isaacs
51% net EUI reduction from national average for building type.
This project received a 2024 COTE® Top Ten Award.

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Microsoft Silicon Valley Campus
Architect: WRNS Studio
Photo credit: © Bruce Damonte Photography
This project received a 2021 COTE® Top Ten Award.

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