Flad

impact report

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The data in this report is referenced from 2024.

Laura Serebin
AIA, LEED AP
President / CEO

our commitment

Committed to creating environments that enhance human potential, Flad believes that it is our collective responsibility to address the mounting challenges of sustainability, resiliency, and human wellness. In practice for almost 100 years, we know that we must champion efforts to improve the environmental and social impact of our business and our work to provide the best possible future for the next generations.

We continue to track our progress to reduce embodied carbon and promote climate resilience through our public commitments as signatories to the AIA 2030 Commitment, SE 2050 program and AIA Materials Pledge. In addition, as a knowledge-based design practice specializing in health and science facilities, we have taken the extra step in 2025 to commit to and set targets through the Science Based Targets Initiative (SBTi).

Our internal focus in 2025 has also been on the development of tools, resources, and education and training events to support our project teams working in an integrative process. We have built out our Design Impact Toolkit to help teams holistically assess and improve the impact of our planning and design decisions throughout the project life cycle. The tools in the toolkit are interactive and developed to promote collaboration with clients in defining priorities and informing decision-making.

Flad is dedicated to understanding the practical and aspirational facets of every project and prioritizing our clients' needs in their efforts to improve the world through advanced healthcare, education, and innovative research that drives discovery. We will continue to guide our clients to do what is right for them, for the communities they serve, and for our planet as we advance our collective efforts to reduce emissions, improve human and ecological health, and plan for adaptation in the face of change.

We share the information in this report to maintain transparency in our reporting, hold ourselves accountable to our commitments and social responsibilities, continuously improve our work, and take greater responsibility for how we run our practice. Together, we will design a better future.

01

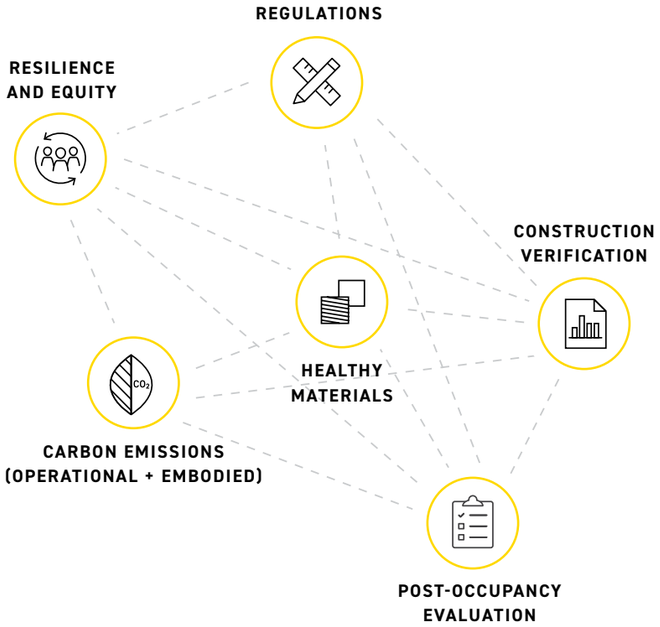
who we are

Flad is an integrated planning and design firm committed to creating spaces that enhance human potential, empowering clients in health, academia, and science to innovate and thrive.

designing for a better future

Our goal at Flad is to help every client make the best decisions for their projects and communities, for both today and the future.

We built our Design Impact Toolkit around an integrative process that helps teams holistically evaluate opportunities for a project's highest performance and best impact across six key categories.



Monterey Bay Area Research Institute, Instrumentation Integration and Testing Facility

Moss Landing, CA

RESILIENCE AND EQUITY

Evaluate risks and needs that a project can address across climate, community, and long-term function.

Our teams use targeted analysis tools and direct conversations with clients to identify resilience priorities that support health, safety, community well-being, and building function during disruptive events.

The MBARI facility accommodates projected sea level rise on the ocean side and FEMA flood zones on the landward side.

Longfellow Real Estate Partners, Avia Labs

Millbrae, CA

CARBON EMISSIONS

Evaluate the carbon emissions associated with a project.

Early analysis of current and future utility and market options gives project teams a clear view of potential emissions pathways and helps guide conversations about effective reduction strategies.

Avia Labs, an all-electric lab building utilizing energy from one of the nation's cleanest grids, has significantly lower operational carbon than the average lab facility.

North Carolina State University, Plant Sciences Building

Raleigh, NC

POST-OCCUPANCY EVALUATION

Learn from completed projects and apply those insights to evaluate future performance.

Post-occupancy evaluations provide our teams with direct feedback on how design and construction decisions perform in real conditions. This data guides continuous improvement that benefits clients, users, and communities on future projects.

University of Wisconsin - Madison, School of Veterinary Medicine Addition and Renovation

Madison, WI

HEALTHIER MATERIALS

Understand how material choices affect human health, ecosystems, and long-term environmental quality.

Project teams track transparency documentation and evaluate environmental and health impacts for all specified materials.

The UW Veterinary Medicine team used this strategy to identify opportunities for healthier substitutions wherever feasible.

REGULATIONS

Understand the sustainability-focused codes, regulations, and ordinances that influence project decisions.

Flad's national reach allows teams to track energy codes, stretch codes, and policy shifts across local jurisdictions. This knowledge helps projects respond to evolving requirements and anticipate future needs.

CONSTRUCTION VERIFICATION

Strengthen communication and alignment during construction to uphold clients' documented sustainability goals.

Our teams stay closely connected to project goals and specifications and use targeted tools to communicate with contractor partners throughout construction. This practice supports responsible execution and protects the design intent.

our public commitments

As a design firm, our greatest influence on the environment comes from the impact associated with our built work. In recognition of this, Flad has signed on to the following commitments:

AIA 2030

We aim for a carbon-neutral portfolio by 2030, extending to carbon-neutral architectural and interior materials by 2040. We are transparent in our efforts, collecting data across our entire portfolio and reporting our progress on these commitments to the AIA every year.

WE'RE COMMITTED BECAUSE

The built environment accounts for over one-third of global energy consumption and emissions. [1]

SE 2050

Flad's structural team has committed to designing carbon-neutral structures by 2050. We track and report our projects to SE 2050 annually, with a goal to raise our reporting each year to ultimately cover our entire structural portfolio.

WE'RE COMMITTED BECAUSE

If concrete were a country, it would rank as the third largest emitter of greenhouse gases on Earth, behind only China and the United States. [2]

AIA Materials Pledge

This pledge underscores our commitment to selecting materials that promote human health, ecosystem health, and climate resilience. By focusing on materials that support a circular economy, we work to reduce landfill waste and conserve resources.

WE'RE COMMITTED BECAUSE

As a firm ranked by Interior Design as a top Giant of Design, Flad designers influence material choices up to 111 times more than an average consumer. [3]

Public Commitment Sources:

1. *International Energy Agency (IEA)*
2. *Phys.org*
3. *ThinkLab*

by the numbers

firm stats

Percentage of staff with sustainability accreditations

59%

Leadership

48%

Designers

41%

Firm-wide

firm rankings

#22

Interior Design
Sustainability Giants

#32

ENR Green Giants

certified projects

6

LEED® BD+C Gold

1

WELL Certified™ Bronze Level

6.4 million gsf

pursuing certification

shaping change together

Our participation in leading climate and resilience groups strengthens our ability to guide clients toward higher-performing, responsible projects that support a healthier future.

U.S. GREEN BUILDING COUNCIL® (USGBC)

Transforming the way buildings and communities are designed

As a founding member, Flad continues our involvement through regional communities and participation in national events.

I2SL — LABS2ZERO

Dedicated to advancing decarbonization of laboratories globally

Participating in the Labs2Zero Leadership Council and several technical advisory councils, Flad staff seek to help I2SL create tools that decrease the impact of laboratories while enabling exceptional science.

MINDFUL MATERIALS

Reducing the embodied impacts of the built environment through our collective material choices

Flad's involvement in the A&D Engagement Group brings awareness to the critical need for transparency in materials.

CARBON LEADERSHIP FORUM (CLF)

Propelling knowledge through embodied carbon research and resources

Flad is an active participant in regional chapters and CLF initiatives to reduce embodied carbon in materials and construction.

DOE BETTER BUILDINGS DESIGN & CONSTRUCTION ALLY

Providing innovative strategies for delivering highly efficient buildings

Flad engages with the federal government to deliver buildings that contribute to a zero-carbon future.

INTERNATIONAL LIVING FUTURE INSTITUTE

Working to build an ecologically minded, restorative world for all people

Through participation on the Material Health Technical Advisory Group, Flad is collaborating with other industry leaders to drive the development and use of regenerative materials.

social impact

In celebration of our 95th anniversary in 2022, Flad launched our Summer of Giving initiative to deepen our service to the communities where we live and work. Since the start of the program, team members across all offices have contributed 2,360 hours of paid time to volunteer efforts that support food security, housing stability, and ecological restoration. The initiative has strengthened our connections with our communities and has become a valued part of our culture.

As a firm devoted to enhancing human potential through our work, we remain committed to improving our own potential and impact.

Our commitment to community support extends far beyond this initiative. Flad staff have been active participants in a variety of programs for many years, recognizing the power of our handprint in our communities.

Efforts include fundraising campaigns for United Way, support for The BLOCK Project in Seattle, BOSS mentoring, book drives for Madison Reading Project, Valentines for Veterans, Second Harvest Foodbank donation drives, and more. Flad employees take pride in our communities and the role we can play in keeping them strong.

02

tracking our progress

Starting in 2017, Flad began tracking our progress against our AIA 2030 Commitment. Our process and goals have evolved since we first began that effort, and the data points we are tracking have expanded.

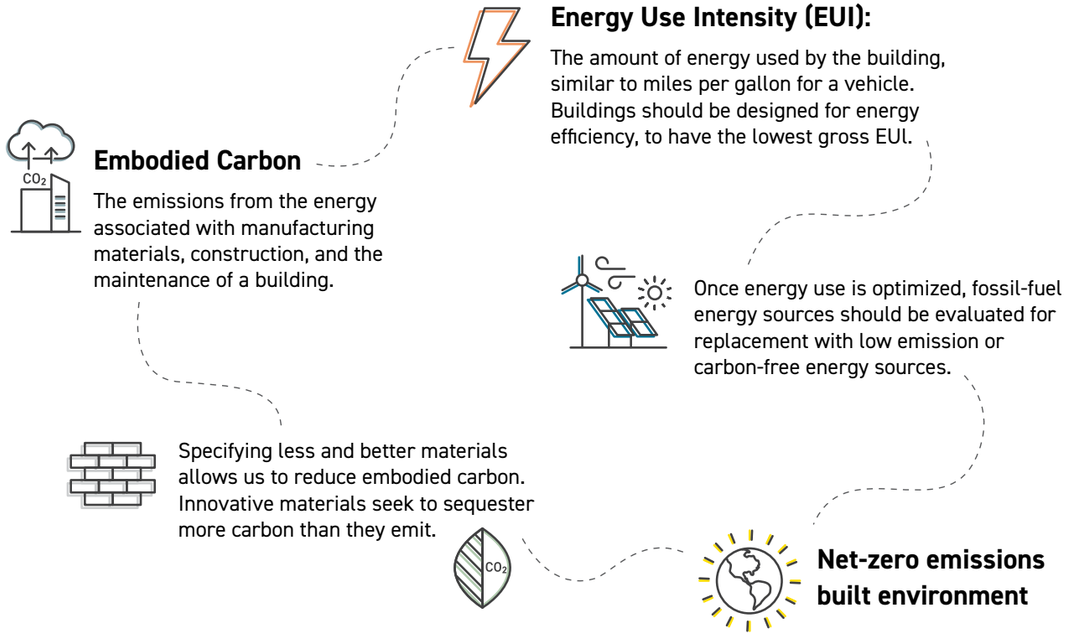
AIA 2030 commitment progress

Meeting our AIA 2030 Commitment requires a clear focus on energy performance and carbon reduction.

We reduce Energy Use Intensity through conservation strategies that include high-performance envelopes and efficient HVAC systems. We also work closely with clients to pursue clean energy sources that support long-term performance and healthier communities.

Progress toward our commitments depends on thoughtful material selections and building systems that reduce embodied carbon. Early evaluation helps teams uncover opportunities that strengthen sustainability outcomes throughout the project's life cycle.

We track results across our portfolio to understand what works, build on lessons learned, and guide our path toward a net-zero emissions built environment on every project Flad designs.

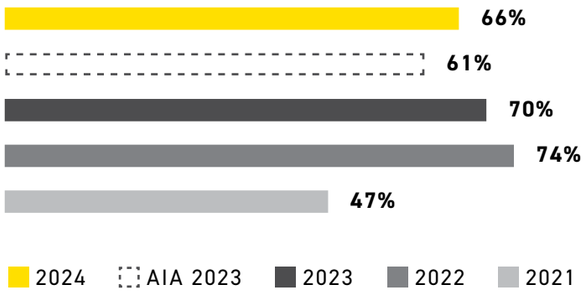


model EUI on every whole-building project

Flad seeks to utilize energy modeling to track EUI on every whole building project in our portfolio, regardless of size, to ensure we understand how our designs are performing.

- The first objective is to increase energy efficiency.

PROJECTS TRACKING EUI BY GSF



calculate operational emissions on every whole-building project

- By 2025, we plan to track fuel source data for all new projects so we can calculate project emissions.
- The second objective is to use cleaner energy sources, whether from on-site renewables or from utilities.

PROJECTS TRACKING FUEL SOURCES

19%

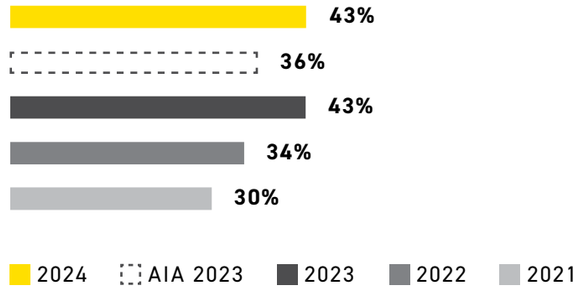
PROJECTS TRACKING ON-SITE RENEWABLES

10%

calculate lighting power density (LPD) on every interior-only project

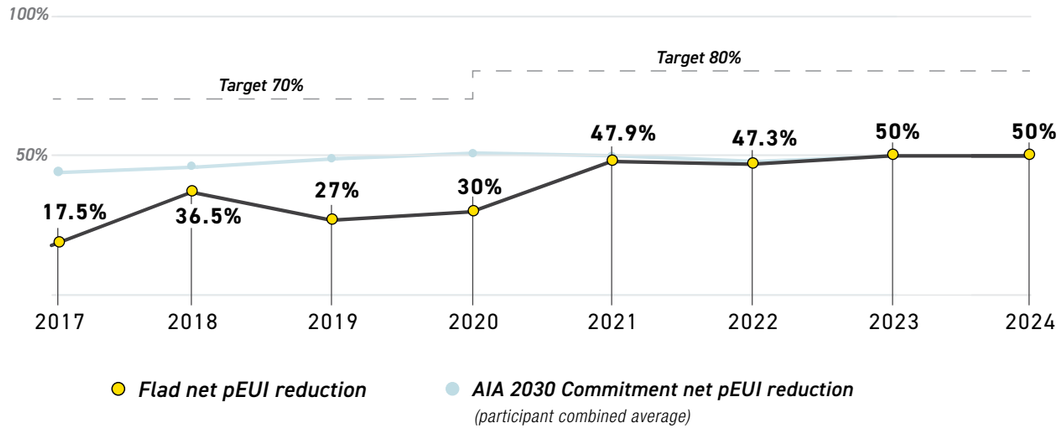
Flad calculates LPD on 100 percent of our interior-only projects, as our primary method of energy reduction for projects without mechanical scope.

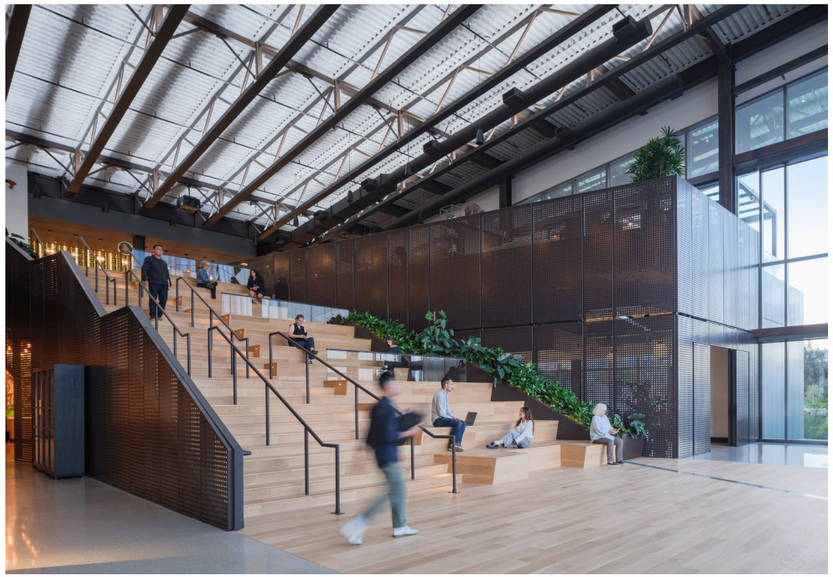
LIGHTING POWER DENSITY REDUCTION



increase number of projects designed to meet the AIA 2030 commitment

Like all 2030 signatories, our goal is for 100 percent of our projects to meet the net predicted Energy Use Intensity (pEUI) target for the reporting year.





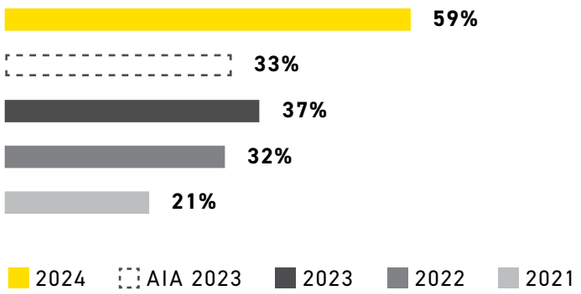
WHAT WE'VE LEARNED

Our best-performing projects utilize integrated design to identify energy conservation measures and emissions reductions strategies from the very beginning of the project design.

track embodied carbon on every whole-building project

Embodied carbon should be assessed in tandem with operational emissions. Our goal is to track embodied carbon on every whole-building project by 2026.

WHOLE BUILDING GSF WITH EMBODIED CARBON MODELED



SE 2050 commitment progress

Flad's goal for SE 2050 is to continue increasing our reported projects until we are reporting on embodied carbon for all significant Flad structural projects (10,000 GSF or greater).

2021

We reported two projects, totaling 441,270 GSF.

2022

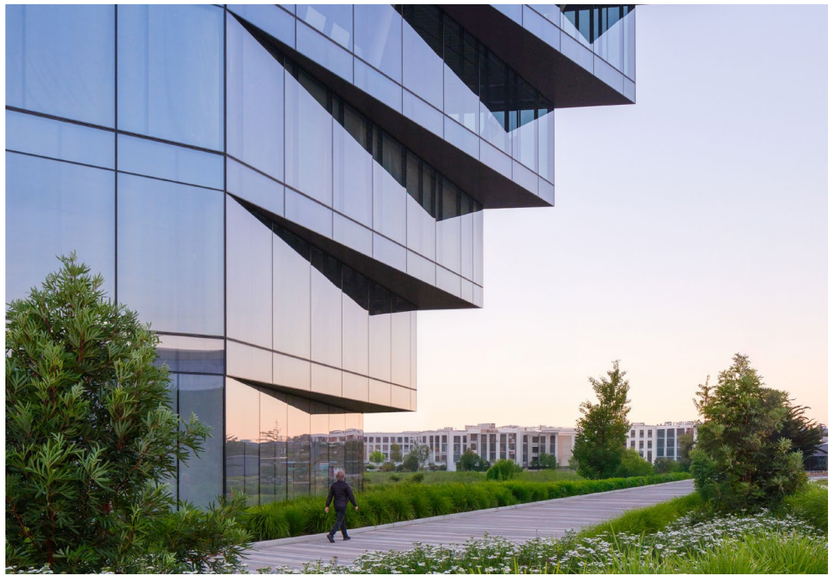
We reported four projects, totaling 832,366 GSF.

2023

We reported three projects, totaling 279,050 GSF.

2024

We reported five projects, totaling 1,063,565 GSF.



WHAT WE'VE LEARNED

Having an in-house structural team allows us to have impromptu embodied carbon charettes by simply walking over to a colleague's desk. This ease of collaboration on structural materials, which are often the highest contributors to a building's initial carbon footprint, is invaluable.

assess and improve the impact of design decisions

As we refine our process and deepen our understanding of the impact of our work, comprehensive information tracking has emerged as a critical tool for informed decision-making.

Insights from our projects strengthens how we design, plan, and collaborate.

We will continue to build on this data-informed approach as we look to the future of design.

"The future of the natural world, on which we all depend, is in our hands."

SIR DAVID ATTENBOROUGH
BROADCASTER, NATURAL HISTORIAN, WRITER

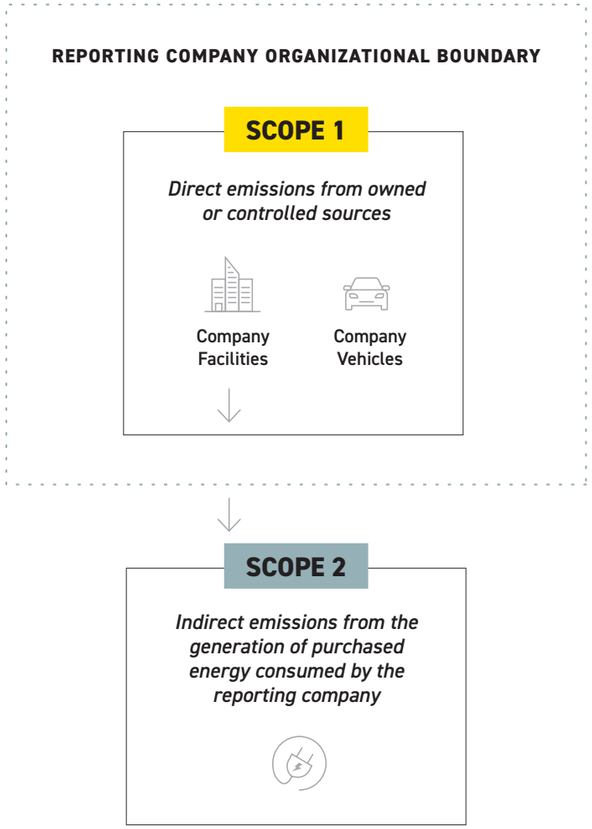
03

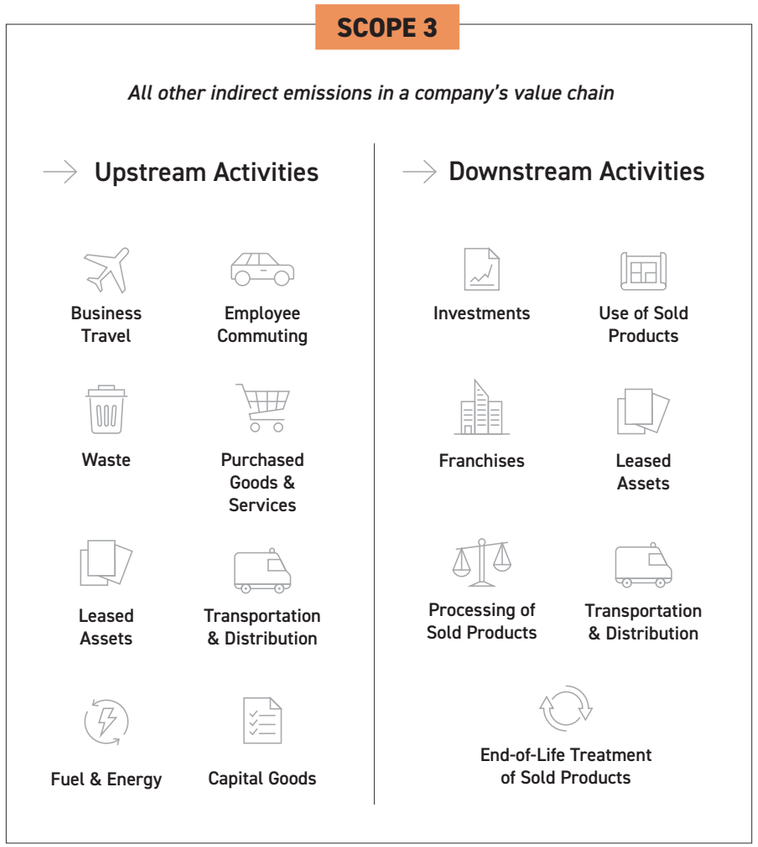
practice impact

Flad is dedicated to prioritizing client service, understanding the practical and aspirational facets of every client, project, and the communities we serve. Our practice impact reflects our efforts to provide our clients with exemplary service while responsibly managing the environmental and social impact of our business and our work.

understanding emissions

Scope 1, 2, and 3 emissions are categories of greenhouse gas emissions companies produce.

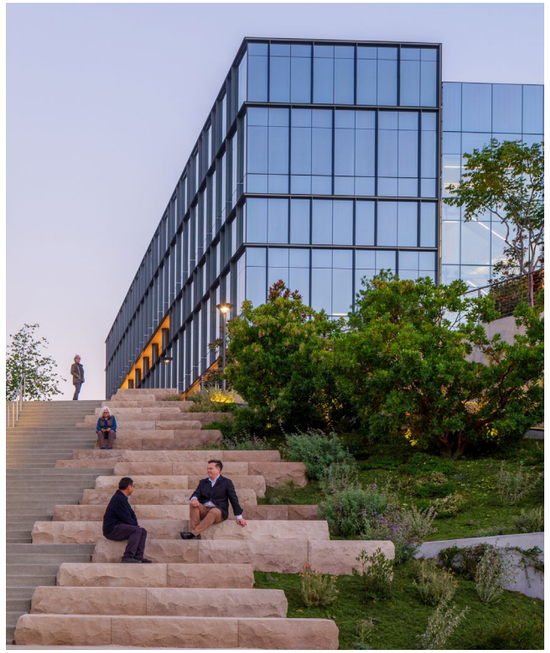




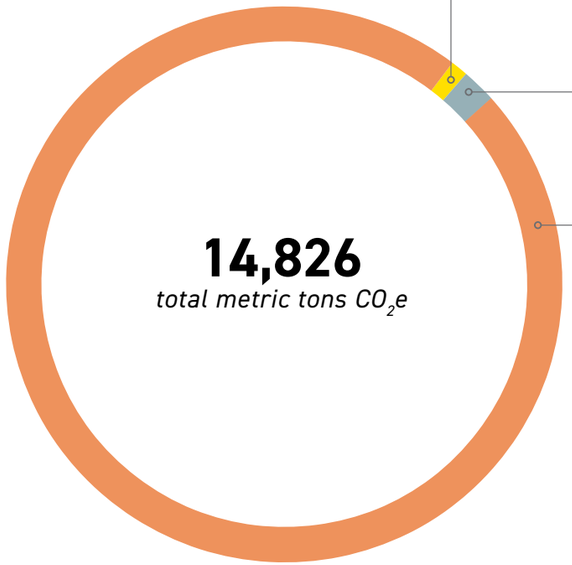
emissions in our practice

While our greatest impact on the environment and our communities comes from the projects we design, Flad is committed to continually improving our own business practices. We focus on reducing our footprint and increasing our positive contributions to the places where we live and work.

To understand where we have the greatest opportunity for improvement, Flad is advancing comprehensive tracking of our Scope 1, 2, and 3 emissions. This insight helps us identify and prioritize actions to conserve resources, pursue cleaner energy, and reduce pollution across our operations to support healthier communities.



2024 EMISSIONS



SCOPE 1

- Stationary Combustion
  6t CO_2e
- Refrigeration & AC
  25t CO_2e

SCOPE 2

- Electricity (market-based)
  199t CO_2e

SCOPE 3

- Purchased Goods & Services
  8,765t CO_2e
- Capital Goods
  4,580t CO_2e
- Fuel & Energy-related Emissions
  35t CO_2e
- Upstream Transportation & Distribution
  5t CO_2e
- Waste Generated in Operations
  16t CO_2e
- Employee Business Travel
  532t CO_2e
- Employee Commuting
  369t CO_2e
- Upstream Leased Assets
  295t CO_2e

Use of Sold Products
534,438t CO_2e

While outside of our GHG inventory, Flad elects to calculate whole-life carbon emissions for our designed buildings. This number represents the estimated lifetime emissions from new construction projects completed in 2024.

improving our impact

STEPS WE'VE TAKEN

- Leasing office space in energy efficient, LEED branding guidelines:
  - Flad San Francisco
  - Flad Tampa
- Utilizing digital document review to reduce paper consumption
- Flad San Francisco is recognized as SF Green Business through green office policies
- Hybrid-work policy and virtual client meetings (when appropriate) reduce commuting and travel emissions
- Recycling in all offices and composting in several offices
  - Flad Madison has diverted 4,502 lbs. of landfill waste through composting
- Flad Madison began purchasing 100% clean electricity in 2024*
- Flad subsidizes public transit passes and provides accommodations for bicycle commuting
- Signed the SBTI Commitment to set near- and long-term targets

*By purchasing clean electricity from our local Madison utility, we support regional renewable energy advancement, and help our utility to offer cleaner, safer energy in our community without raising rates on customers who would be unduly burdened by a cost increase.

TARGETS AND NEXT STEPS

- Set science-based targets by the end of 2025 and submit to SBTi for review
- Target actionable emissions reductions to meet near-term goals
- Continue to work with our clients to reduce the emissions and impacts associated with our built work

"Nature is our biggest ally and greatest inspiration."

SIR DAVID ATTENBOROUGH
BROADCASTER, NATURAL HISTORIAN, WRITER

projects making progress

advancing one health

UNIVERSITY OF WISCONSIN - MADISON, SCHOOL OF VETERINARY MEDICINE

This 140,000-square-foot expansion strengthens the School of Veterinary Medicine's clinical, research, and teaching mission while restoring an important natural corridor on campus. The facility creates a healthier environment for students, clinicians, animals, and the surrounding ecosystem through a unified One Health approach.

- Followed the AIA Framework for Design Excellence with strategies that support ecological health and occupant well-being
- Prioritized daylighting, biophilic strategies, and views to green space and creek
- Selected healthier materials with full transparency documentation for all high-touch interior finishes
- Enhanced stormwater and on-site rainwater management strategies reduce runoff and support landscape resilience

activating a sustainable campus hub

HEALTHPEAK PROPERTIES, VANTAGE HANGAR

The Vantage campus supports a thriving life science community with 342,000 square feet of leasable space across Buildings A and B, plus a 40,000-square-foot amenities hub in South San Francisco's major research district. Known as The Hangar, the amenity building serves as the social and wellness heart of the campus, bringing together dining, fitness, and gathering spaces within an environment designed to support occupant comfort while reducing environmental impact.

- Achieved an 18 percent reduction in global warming potential through a targeted embodied carbon strategy informed by life-cycle assessment
- Reduced structural concrete emissions by incorporating 50 to 70 percent cement replacement, significantly lowering material-related carbon impacts
- Specified rock wool insulation with higher recycled content for roof and wall assemblies, supporting durability and reduced embodied environmental impact

powering a carbon-neutral future

VANDERBILT UNIVERSITY, HIGHLAND CENTRAL UTILITY PLANT

The Highland Central Utility Plant anchors Vanderbilt's long-term effort to reduce campus carbon emissions and expand reliable, efficient utility infrastructure. Serving as both a critical energy hub and an educational resource, the LEED Gold facility supports the university's ongoing carbon-neutral operations.

- Provides new chilled and hot water production capacity, along with a high-voltage substation, to meet increasing campus demands with improved efficiency
- Designed with capacity for future thermal storage and emerging technologies, strengthening long-term resiliency
- Features a transparent façade that reveals equipment and color-coded piping, connecting students and visitors to the university's sustainability story and commitment to carbon reduction
- Supports campus-wide emissions reduction by modernizing aging systems and improving thermal energy efficiency

our sustainable design services

- Sustainability Visioning
- Strategic & Campus Planning
- Resilience Planning
- Certification Administration
- Material Consulting
- Whole Life Carbon Assessment
- Sustainable Landscape Design
- High-Performance Building Design
- Post Occupancy Evaluation

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