

SCHENKEL
SHULTZ



November 3, 2023 | v1

STEWARDSHIP ACTION PLAN

SCHENKEL
SHULTZ

Vision

Inspire our
community
through
impactful
design

Contents

Action

Design

Goals

Education

Governance

Thought

Definitions





Live oak trees with Spanish moss, Amelia Island State Park, FL

ACTION

One touch of nature and
the whole world is kin.

—WILLIAM SHAKESPEARE



Design for
Integration



Design for
Integration

ACTION



Design for
Energy



Design for
Water



Design for
Resources



Design for
Well Being

Background

By signing on to the AIA 2030 Commitment (**Commitment**) Schenkel Shultz agreed to submit a firm-wide Sustainability Action Plan (**SAP**) by November 2023. After assembling and conducting two Stewardship Focus Group Workshops and reviewing the AIA's requirements, the Stewardship Action Team drafted the following priorities and actionable initiatives that address the steps we will be taking to improve our processes, integrate metrics and in turn help us to improve the outcomes of our projects.

This SAP is the basis of our public 2030 Commitment, available for view on our Website.



OIA Intermodal Terminal Facility
LEED®v4 Certified, 2018
-First LEEDv4 (BD+C) certified project in Florida



Lynn Business Center, Stetson University
LEED® Certified, 2003
-First LEED certified project in Florida

Stewardship Action Plan

Schenkel Shultz has embraced stewardship strategies and green certifications, such as Integrative Process and Leadership in Energy and Environmental Design (**LEED®**). In 2003, our firm designed and administered the first LEED® certified project in Florida as an early adopter of formal sustainability measurement. Since this first accomplishment, our studio has produced over 50 LEED projects. In 2018, through a consulting contract, we completed the first LEED v4 New Construction project for Florida, which includes the New Construction v4 Campus on the Orlando International Airport, acting as the LEED Administrator.

When LEED first became a formal rating system, we encouraged all design professionals to obtain their LEED® Accredited Professional designation. We now aspire to have diversely trained employees, in many other programs including



WELL™, Florida Green Building Coalition (**FGBC**) Commercial, **Green Globes**, and International Living Futures Institute (**ILFI**) Living Building Challenge. These accreditations reinforce a diverse range of sustainable and healthy practices for a more robust firm-wide approach to performance targets and strategies.

A large portion of our portfolio is educational design which is subject to state statutes and require state funded schools to be designed to a green building standard or certification. We have designed these buildings to High-Performance Building standards, LEED, WELL, Green Globes and Florida Green Building Coalition commercial standards and have achieved certification on select projects. Our work with the Department of Defense Education Activity (DoDEA) worldwide has met LEED® Schools certification in partnership with their Guiding Principles. These projects often have a green building or related STEM teaching component associated with the building design.

In recent years, following the initiative of becoming better partners in the design and construction of buildings, we designed our own green building plan that follows the AIA Framework for Design Excellence (**Framework**) principles. This plan incorporates Integrative Process (our overarching principle), Water, Energy, Resources and Well-being. The plan implements better building performance through envelope choices, construction detailing, and testing for the envelope's air leakage. This process has allowed us to gain data collection from our engineers, testing agents, and envelope commissioning agents, allowing our designers and managers to become better partners in the design and construction of the buildings we produce.

Our current focus is on the integration and exploration of Design and Stewardship strategies.





DESIGN

Everglades National Park, Homestead, FL

The best way to predict
the future is to design it.

—PETER DRUCKER



Design for
Energy



Design for
Resources



Design for
Energy



Design for
Resources

DESIGN



Design for
Discovery



Design for
**Equitable
Communities**



Design for
Economy



Design for
Ecosystems



Design for
Change

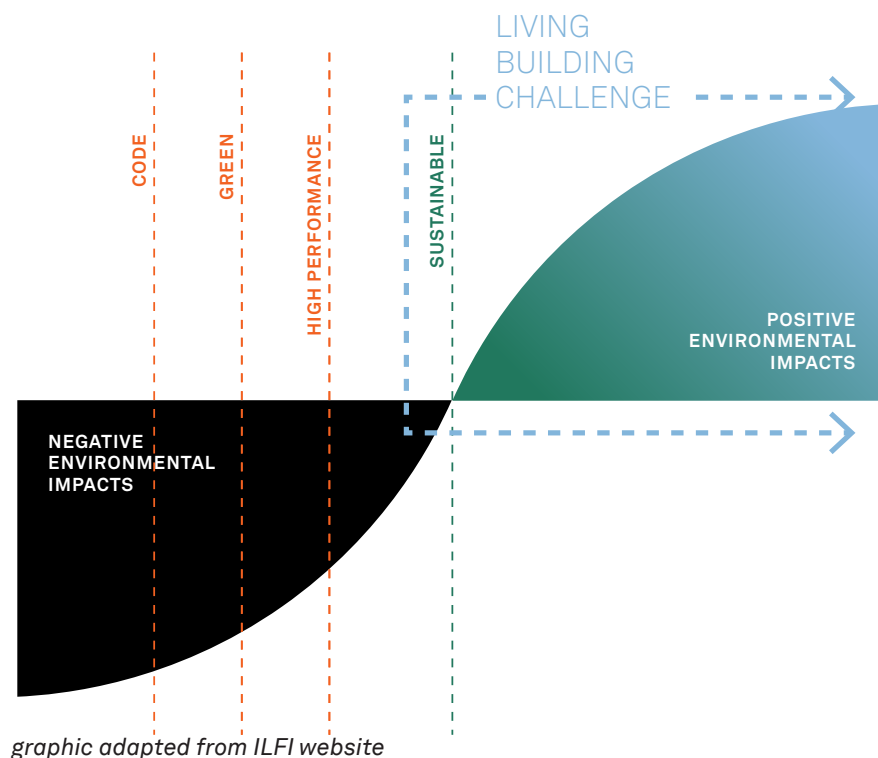
Design and Approach

Our thirst to become better designers and taking on the **Commitment**, has pushed us to ask for more detailed information sooner in our design process to make effective decisions from the beginning in the conceptual and schematic design phases regarding massing, R-values, and window-to-wall ratio. We wish to evaluate different solutions against each other, the program, and budget to attain the best holistic performance.

Whether pursuing a certification or not, we aspire to produce the best performing buildings possible. Our definition of Stewardship aligns with the **Framework** principles with particular focus on reduction in energy and water consumption, increasing daylight and incorporating healthy materials. We include designing for health, wellness and safety procedures, and waste reduction in both

construction and in operations. In 2020 we created an internal Stewardship Guide using the **Framework**. We are now embarking upon a full incorporation of all 10 principles into our policies in 2024 and into our office standards and procedures within the 2025 timeframe. We are focusing on Discovery, Equity, Economy, Eco-systems, and Change.

The firm has signed the AIA Materials Pledge (**Pledge**) to further our pursuit of healthy, environmentally friendly products and to drive a change in consumerism that reduces embodied carbon in manufacturing. Demand informs supply, driving the market to adopt a circular economy mindset. We support the **Pledge** because it aligns with the **Framework** and the **Commitment** and positions us to plan, measure, improve, and achieve results.



2024/2025 Design Goals

- Report on the **Commitment** for Operational Carbon

Incorporate all 10 principles of the **Framework** into our project evaluation, design, and reporting.

- Apply for a Committee on The Environment (**COTE**) Award.
- Retool our Materials Library to be compliant with the **Pledge** for both Interior finishes and Architectural systems including exterior envelope.
- Pilot 8-12 projects with a modeling tool through the entire design process.
- Retro-evaluate our education designs and LEED Projects for performance with published results.

2030 Design Goals

- All projects meet the **Commitment** through incremental reduction in Operational Carbon and Embodied Carbon.
 - Operational Carbon reporting meeting the Carbon Neutral target
 - Embodied Carbon reporting meeting 65% reduction target established by AIA.
- Utilize the **Framework** to achieve an AIA COTE Award.
- All projects meet the **Pledge** through education, an efficient in-house materials library, updated specifications with performance criteria, required tracking, and product life-cycle analysis.
 - **ILFI** Materials Petal compliant project
 - Incorporate **Red-List Free** materials.
- Reduce pEUI on all projects, lessening reliance on photovoltaics to achieve goal.



Dry Tortugas National Park, Homestead, FL

GOALS

Sustainability goals
should be ambitious
but achievable.

—DAVID ORR



Design for
Discovery



Design for
Discovery

GOALS



Design for
Energy



Design for
Resources

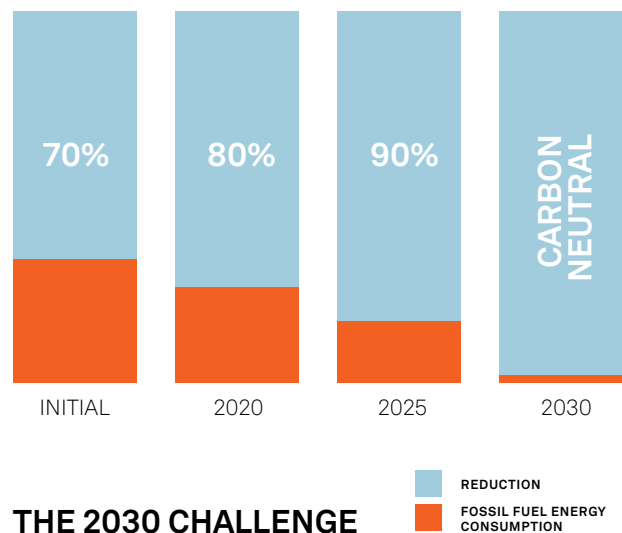
Goal Setting and Evaluation

The **Framework** has ten overarching principles. We evaluated each principle and established actionable key performance indicators (KPIs) including incremental targets to help us progress towards meeting the **Commitment** and the **Pledge**.

Specifically, we are targeting the **Commitment's** operational carbon goals of 90% reduction by 2025 and carbon neutral projects by 2030. Currently this requires reduction strategies along with the addition of renewables. Many of Florida cities and communities have adopted the AIA 2030 targets and require, at minimum, a design that incorporates an on-site photovoltaic solar array. When that is not physically possible, we work with the municipality to identify other options.

We are also adopting the embodied carbon goals of the **Commitment**. We aspire to a 45% reduction in our portfolio by 2025 and a 65% reduction by 2030. The overall goal is to have zero embodied carbon emissions by 2040.

As mentioned before, we previously set strategies for evaluation called the Stewardship Guide which was used for specific projects. We are in the process of expanding our metrics to all principles and proliferating forward-thinking conversation throughout the firm's studios, and project typologies. A deeper dive into the principles of Energy and Resources bound by Discovery aligns with our revamped vision and mission statements. Our broader team is working on incorporating the **Framework** into our business model and operations to include metrics, data collection, and reporting. We fully understand that you cannot improve what you cannot measure.



OPERATIONAL CARBON

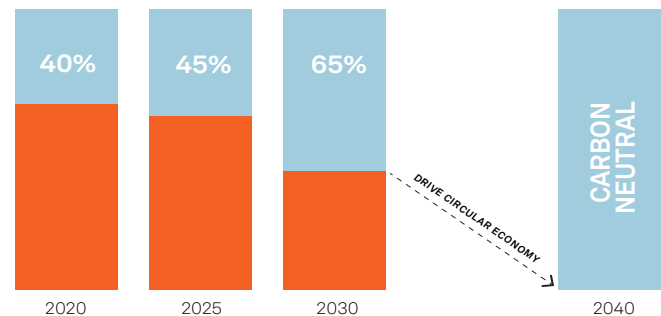
Refers to the GHGs emitted by the daily energy used for building operations such as lighting, heating, and cooling. Typically measured in “metric tons of CO₂e/yr.”

2024/2025 Commitment Goals

- Data Collection for the [Commitments'](#) DDX reporting
 - Current design projects utilize cove.tool reports
 - EPA's Energy STAR® Portfolio Manager® (ESPM) tracking for operational projects (1 year occupancy)
- Encourage sustainability diversity and accomplishing Accredited Professional designations.
 - LEED® Green Associate and LEED® AP with specialty
 - WELL AP™
 - FGBC Commercial Professional
 - Green Globes Professional (GGP)
 - Living Future Accreditation (LFA)
 - Embodied Carbon Studies
 - Evaluate on selected projects.
 - Meet 50% reduction on two projects.
- Evaluate the ILFI™ Living Building Challenge™ Material Petal to showcase our commitment to the [Pledge](#).

2030 Commitment Goals

- All projects tracked and meeting the [Commitment's](#) carbon reduction benchmarks
- COTE Top Ten project Award to showcase our promise to uphold the [Framework](#)
- ILFI™ Living Building Challenge™ Project certification.



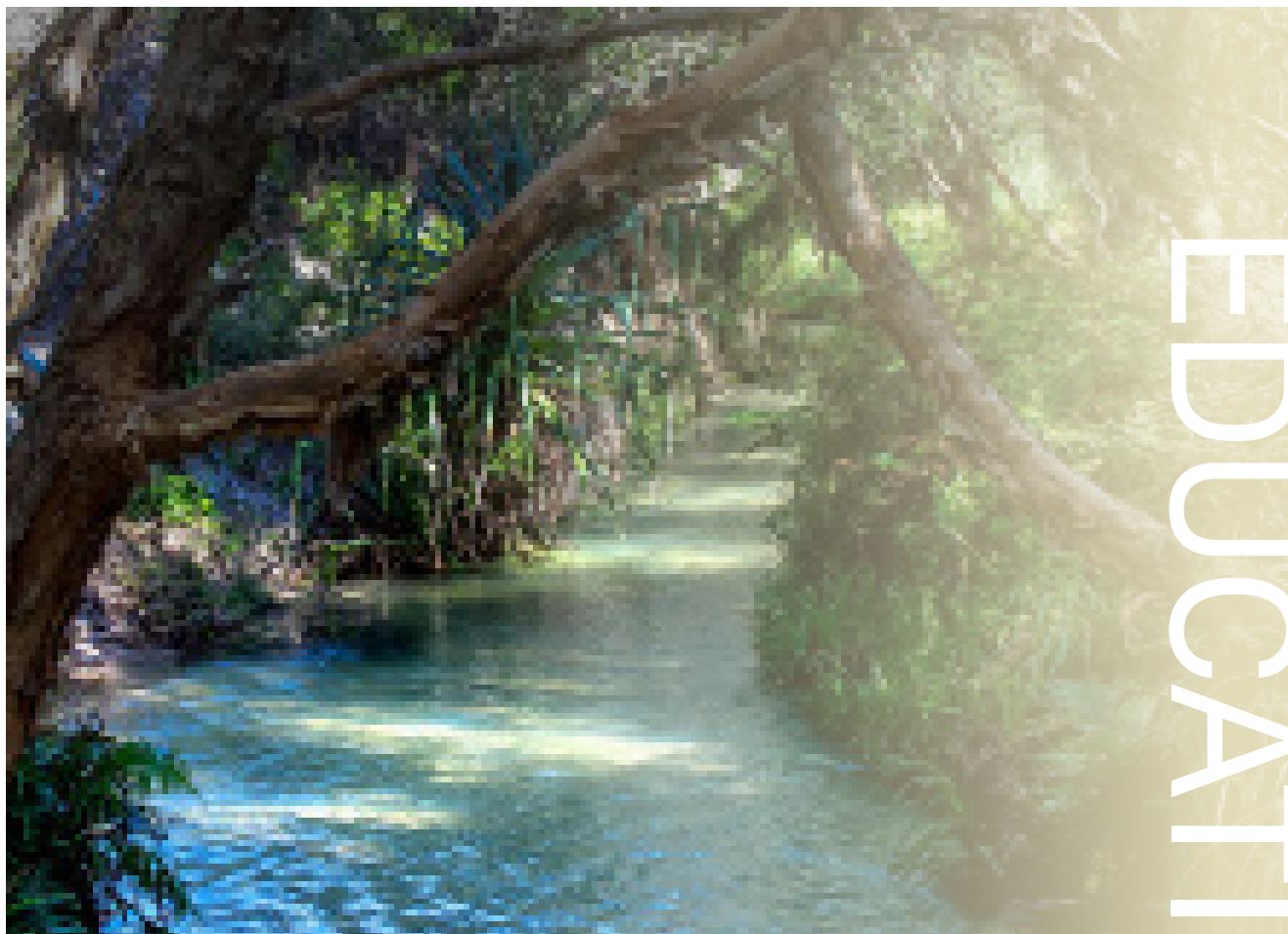
THE 2030 CHALLENGE

■ REDUCTION
■ FOSSIL FUEL ENERGY CONSUMPTION

EMBODIED CARBON

Also referred to as upfront carbon, this refers to the GHGs emitted during extraction, manufacture, transportation, construction, replacement, and deconstruction of building materials, together with the end-of-life emissions.

EDUCATION



Blue Springs State Park, Orange City, FL

The best way to learn is
by doing.

—ARISTOTLE



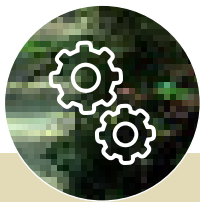
Design for
Energy



Design for
Resources



Design for
Energy



Design for
Resources

EDUCATION



Design for
Integration



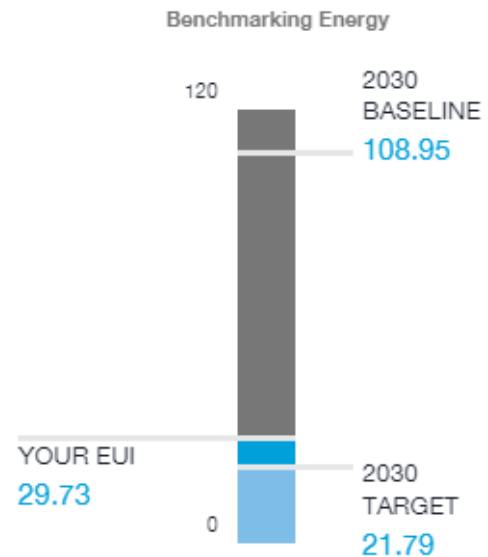
Design for
Discovery



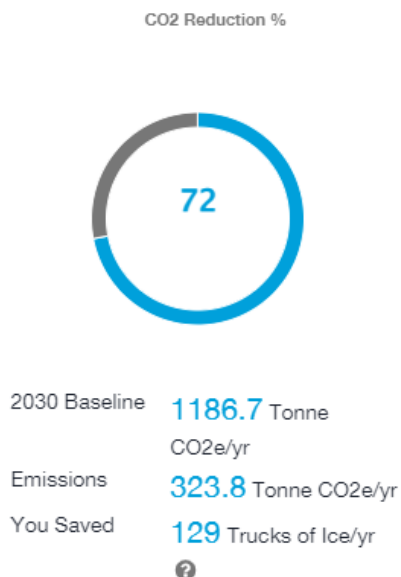
Design for
Change

Training and Education

A sustainable program needs accessible education to maintain the standards and success of the firm-wide initiatives. The firm has recently established a dedicated Stewardship Action Team focused on evaluating and retooling our processes to succeed in meeting the **Commitment, Framework** and **Pledge** objectives by collecting the proper data and generating faster evaluations of multiple design scenarios. We also assembled a task force which is comprised of members from every project sector, BIM group, and culture committee. These pull from Sarasota, Estero, and Orlando offices and collectively guide the Stewardship Action Team to identify gaps in understanding and implement desired workflows.



cove.tool graphic generated on an Education project



cove.tool graphic generated on an Education project

We learned from our Stewardship Focus Group that we are all willing to engage in the Stewardship initiatives but have varied levels of sustainability background, education, and execution. With this understanding, we have raised the following priorities and incremental goals to help our team create the “depth of bench” needed to influence mastery in all our three AIA Initiatives; the **Commitment**, the **Framework**, and the **Pledge**.

We will start with training in Energy and Resources and progress into higher expectations with integration, discovery and change. These internal goals are scheduled for annual review. **Each year the idea is to celebrate successes, adjust priorities, and adapt to rapidly shifting technologies.**

2024/2025 Education and Cultural Goals

- Have all studio's trained in energy box modeling to affect better outcomes
- Have "elevator speeches" for employees that showcase our commitments and achievements.
- Half of the CEUs we schedule to be GBCI accredited.
- Stewardship Education Series (similar to Design Spotlights)
 - AIA Materials **Pledge** related CEUs:
Embodied Carbon 101
 - EPA's Target Finder
 - EPA's EnergySTAR Portfolio Manager
 - Procedures for State Statute Green Building Compliance documented, and appropriate Studios trained:
 - GBI's Green Globes, v2021
 - FGBC's commercial certification, v3
 - USGBC's LEED certification, v4 and above
- Standards updated for Stewardship Action including ease of reporting green certifications and evaluating strategies against each other.
 - Revit templates
 - Materials selection and tracking
 - energy modeling and embodied carbon statistics available

2030 Educational and Cultural Goals

- All employees are trained in the **Commitment** targets, can advocate effectively, and can meet the reductions.
- All CEUs are GBCI accredited, or climate science vetted.
- All employees fully understand climate science and building sector carbon contributions and know how they personally influence change.

AIA framework for design excellence principle	Icon	Key performance indicator (KPI)	5-year	10-year
P1. Design for Integration		Approximately what percent are designed to meet one or more green certification?	50%	100%
P2. Design for Equitable Communities		Approximately what percent of projects involved a structured participatory or community design process?	50%	100%
P3. Design for Ecosystems		Approximately what percent tracks use native or climate-appropriate plants supporting native or migratory animals?	50%	100%
P4. Design for Water		Approximately what percent tracks on-site water management?	50%	100%
P5. Design for Economy		Approximately what percent of projects are major retrofits of existing buildings?	35%	50%
P6. Design for Energy		What is the current pEUI across your portfolio?	20	0
		Approximately what percentage of projects use energy modeling during design phases?	100%	100%
P7. Design for Well-being		Approximately what percent of projects involve client discussions about health and well-being?	50%	
P8. Design for Resources		Approximately what percent of project share whole-building LCA?	50%	100%
		Approximately what percent of projects incorporate health and environmental impacts into building product selection?	50% Living Building Challenge*	100%
P9. Design for Change		Approximately what percent of projects include qualities of resilience?	100%	
P10. Design for Discovery		Approximately what percent of projects are evaluated using a post-occupancy evaluation?	50%	100%

*1 project designed to meet

GOVERNANCE



Key West, FL

Good governance is
essential for sustainable
development.

—KOFI ANNAN



Design for
Energy



Design for
Resources



Design for
**Equitable
Communities**

GOVERNANCE



Design for
Energy



Design for
Resources



Design for
**Equitable
Communities**

Governance and Reporting (Operations)

Building upon an ethos of sustainability influences much more than our approach to design. It informs all we do, from large operational decisions to the smallest of choices. Understanding the impact our own behavior has on others and the environment, we have set goals for improving our own actions and how we are organized and function as a firm.

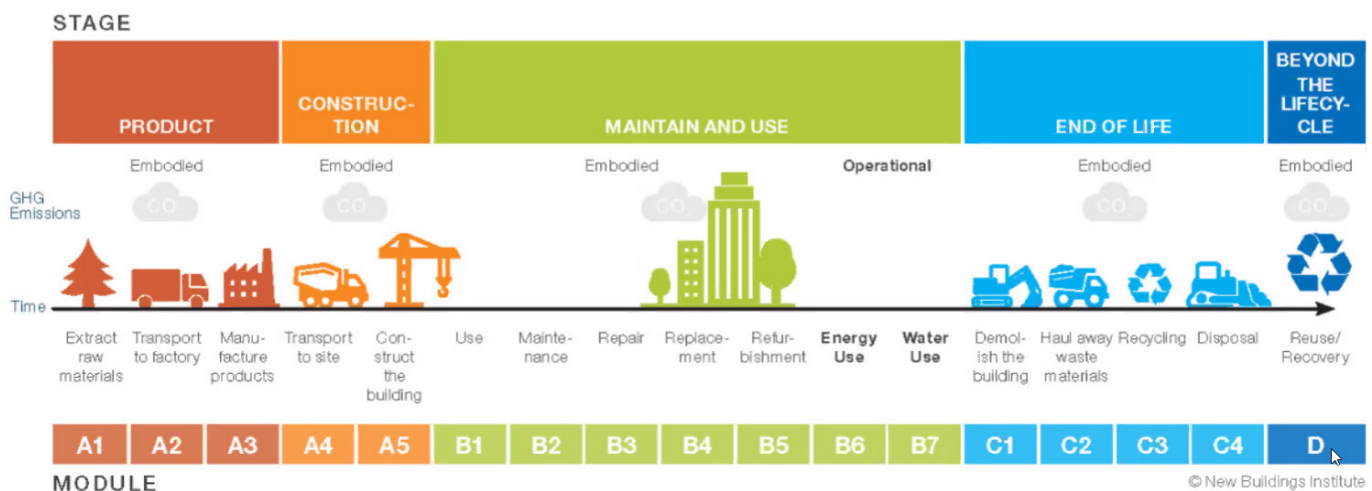
As the **Commitment** focuses on building emissions, we strive to mitigate the emissions we produce by our transport: traveling to our jobsites, meetings, presentations to our employees' commuting regarding greenhouse gas emissions and global warming potential. We make healthy and sustainable food choices for events and promote healthy choices for in-house needs. We also reduce disposables and extra packaging associated with catering.

We are venturing into a more detailed understanding of our business practices including expansion of diverse voices. Multiple perspectives can proliferate and improve decision making. The firm often participates in organized community outreach for our legacy markets. We believe we should solicit varied opinions from our community to solve societal challenges through the built environment, supporting a collective process. This closely

relates to the **Framework** which we aspire to live in our practice, partnering with the community in which we inhabit.

Shenkel Shultz strives to promote a circular economy by our processes, protocols and purchasing. We look to the **Pledge** to inform our choices. In the past, we have looked to LEED® and WELL™ to help our clients implement green operational strategies for their facilities. As owners and inhabitants of our own offices, we relocated our South Florida offices to align with our project and community involvement. We carefully chose locations that are in vibrant areas, buildings that have history, reflecting the communities in which we reside. The firm is now looking to relocate our Orlando office to enhance our presence, local partnerships and further enhance our relationships including outreach to civic institutions, charitable entities, and learning institutions.

Over the past few years our firm demographics have deliberately shifted from primarily architects to include BIM specialists, interior designers, graphics, and artists. We added specialized creatives, a Stewardship team which facilitates the integration of metrics and modeling to support a robust Integrative process, bringing energy and resources forward.



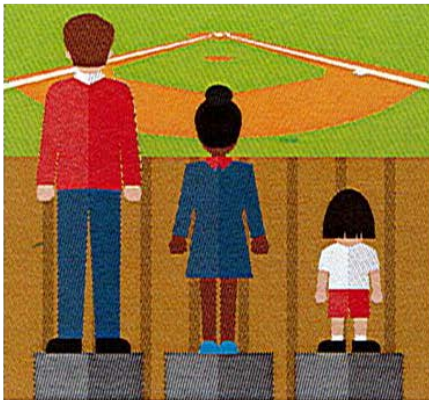
2024/2025 Governance Goals

- Explore formally implementing the **JUST** Program (ILFI)
- Business model and operations includes sustainability benchmarking.
- Reduce electronic storage capacity;
 - reduce junk email
 - use cloud-based transferring for recipients to reduce email size
 - provide hyperlinks for internal emails
- Food services evaluated for healthy options, reduced packaging, compostable cutlery.
- Kitchen supplies to eliminate plastics and single use items.
- Update purchasing, protocols and cleaning procedures

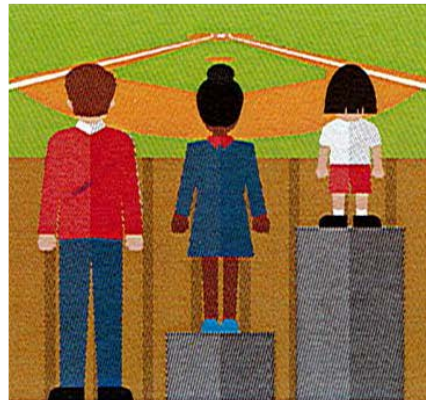
2030 Governance Goals

- Explore relevant programs such as B-Corp, Corporate Sustainability Reporting (**CSR**) and Environment, Social Governance (**ESG**) reporting.

EQUALITY VS. EQUITY



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.



Everglades National Park, Homestead, FL

We need to think differently
about how we do business
if we want to create a
sustainable future.

—DAVID ORR

THOUGHT



Design for
Discovery



Design for
Discovery

THOUGHT



Design for
Ecosystems



Design for
Change

Thought Leadership

Becoming a Thought Leader requires that one pushes the boundaries of current practice, begins to embrace uncertainty, and shares influential experiences that could inform the decisions of others. To specifically establish ourselves as Thought Leaders, we are compelled to fully embrace the principles of the **Commitment**, **Framework**, and **Materials Pledge**. Our experiences of working through uncertainty while pushing the status quo can be used to show others how stewardship goals can be achieved; this is how we will lead by example.

The spirit of Schenkel Shultz is entrepreneurial. From inception in 1958, expansion in 1983 into Florida, to our current Partnership, we have taken steps to deliver and to improve building performance outcomes. Stewardship is a natural extension of our drive to educate our current consultants and contractors on our goals, with programs they can support that align with the AIA 2030 reductions.



2024/2025 Leadership Goals

- Share air-barrier testing experiences, “lessons learned” and unique outcomes.
- Participate in committees/organizations that further our goals and passions.
- Community Action Days
 - Continue with Boy & Girls Club, Coalition for the Homeless, SW Florida
 - Continue with Construction Orlando / Second Harvest Food Bank
 - Add community run/walks at Sarasota/ Estero
 - Add Green Apple Day events in partnership with local schools
 - Add Outdoor clean-ups such as Wekiva, Adopt-a-Highway
- Experiment with AI to generate design ideas and to test theories.
- Showcase a case study of our SAP in action on our own facilities.
- Attend National Conferences, present our experience adopting these AIA objectives.
- Publish subject-based white papers.



2030 Leadership Goals

- Sought after as Thought Leaders in the design community.
- Organize roundtables and multi-firm think-tanks.
- Partner with a local University
 - Create a tool or program, specialized research, or innovative solution.
 - Create a curriculum, thesis topic or studio collaboration.
 - Elevate or automate metrics and tracking.
- Partnering with all our consultants and contractors on climate action

Call to Action

We made these commitments to change for the better and to keep ourselves accountable. We challenge the design and construction community to accept their respective commitments such as **SE 2050 Commitment**, **MEP 2040 Challenge** and the **Contractor's Carbon Commitment**. It is imperative that we help each other drive change, at scale, through collective action.



Design for
Integration



Design for
Energy



Design for
Water



Design for
Resources



Design for
Well Being

DEFINITIONS



Design for
Discovery



Design for
**Equitable
Communities**



Design for
Economy



Design for
Ecosystems



Design for
Change

Definitions

Commitment

The **AIA 2030 Commitment** is an actionable climate strategy that gives us a set of standards and goals for reaching net zero emissions in the built environment. Since the built environment creates a staggering 40% of the world's emissions, architects, engineers, and owners play a key role.

Pledge

AIA developed the Architecture & Design **Materials Pledge** to inspire members to shift the way in which we evaluate the products and finishes that we specify daily. The A&D Materials Pledge considers five aspects when evaluating products and finishes: human health, social health & equity, ecosystem health, climate health, and a circular economy.

Framework

Comprised of 10 principles and accompanied by searching questions, the **AIA Framework for Design Excellence** seeks to inform progress toward a zero-carbon, equitable, resilient, and healthy built environment. These are to be thoughtfully considered by designer and client at the initiation of every project and incorporated into the work as appropriate to the project scope.

WELL

The **WELL Building Standard®** is a performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort, and mind.

WELL is managed and administered by the International WELL Building Institute (IWBI), a public benefit corporation whose mission is to improve human health and wellbeing through the built environment.

Green Globes

A series of rating and certification systems that encourage improved environmental and health performance for all types of buildings except residential structures. Green Globes™ is administered in the United States by the Green Building Initiative.

Living Building Challenge

Launched in 2006 by Seattle architect Jason F. McLennan and an organization then called the Cascadia Green Building Council, the LBC currently requires projects to produce more clean water and more clean energy than they use, and to send less waste to the landfill than the amount of salvaged material used in the building.

JUST

Just is a “nutrition label” for socially just and equitable organizations. As a voluntary disclosure tool for organizations rather than a certification program, it is a transparency platform for organizations to disclose their operations, including how they treat their employees and where they make financial and community investments.

ILFI

Zero energy is recognized worldwide as one of the highest aspirations in energy performance in the built environment. The International Living Future Institute's (ILFI) Zero Energy (ZE) Certification was created to allow projects to demonstrate zero energy performance, building an advanced cohort of projects with the integrity of third-party performance certification.

This program, the only international zero energy certification:

- certifies that the building is truly operating as claimed, harnessing energy from the sun, wind or earth to produce net annual energy demand through a third-party audit of actual performance data
- provides a case study platform for your project to inform and accelerate other zero energy efforts throughout the world
- celebrates a significant accomplishment, and differentiates both the building and those responsible for its success in this quickly evolving market

Red List Free

Red List Free means that textiles used for upholstery, walls, windows and panels are free of the Living Building Challenge's identified concerning chemicals and compounds. Commonly used chemicals on the Red List:

- Pollute our environment
- Bio-accumulate up the food chain until they reach toxic concentrations
- Harm construction and factory workers

FGBC

The Florida Green Building Coalition (FGBC) is a nonprofit 501 (C)3 Florida corporation dedicated to improving the built environment. Mission is to lead and promote sustainability with environmental, economic, and social benefits through regional education and certification programs.

GBCI

GBCI is the premier organization for independently recognizing excellence in green business industry performance and practice globally, through third party verification services for certification and credentialing.

USGBC

The U.S. Green Building Council (USGBC), co-founded by Mike Italiano, David Gottfried and Rick Fedrizzi in 1993, is a private 501(c)3, membership-based non-profit organization that promotes sustainability in building design, construction, and operation.

Green Apple Day

Started in 2012, Green Apple Day of Service is an international movement of over 1 million volunteers in 80 countries celebrating the central role that schools play in preparing the next generation of global leaders in sustainability.

***CEU:** One **Continuing Education Unit** is defined as 10 contact hours of participation in an organized, relevant continued education experience. Often CEUs earned as part of state regulation can also count toward association requirements (Arch. Digest).

***COTE:** The AIA Committee on the Environment works to advance, disseminate, and advocate design practices that integrate built and natural systems and enhance both the design quality and environmental performance of the built environment (AIA).

***EPD:** The **Environmental Product Declaration** is a report resulting from a life cycle assessment based on standardized product category rules. An EPD is initiated by a product manufacturer, and documents the ways in which a product, throughout its lifecycle, affects the environment (AIA).

***ESPM:** EPA's **Energy Star Portfolio Manager** is a no-cost, interactive energy management tool that allows users to securely track and assess energy and water consumption across a building portfolio.

***EUI: Energy Use Intensity** expresses a building's energy use as a function of its size or other characteristics. Generally, a low EUI signifies good energy performance (Energy Star).

***HPB: A High Performance Building** is a structure that integrates and optimizes all major sustainability attributes, including energy efficiency, durability, life-cycle performance, and occupant productivity (Energy Policy Act, 2005).

***HPD:** Products used in the built environment should meet specific criteria for the health and safety of all occupants. These are called Health Product Declarations (HPDs) and are the standardized way of reporting the contents of building products (Archtoolbox).

***LPD: Lighting Power Density** is the amount of power used by lighting per unit of building area. In the United States, LPD is measured in watts per square foot (Archtoolbox).

***pEUI: Predicted Energy Use Intensity** describes the energy use for a project based on modeled site energy. pEUI equals the site kBtu per year divided by the project's square footage (AIA KnowledgeNet).

$$pEUI = \text{site kBtu/sf-yr}$$

***VOCs: Volatile Organic Compounds** are compounds that have a high vapor pressure and low water solubility. VOCs are emitted as gases from certain solids or liquids. Concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors (US EPA).

***MEP 2040 Commitment** is a pledge to reduce operational and embodied carbon across MEP Systems on all projects targeting zero by 2040.

***SE 2050 Challenge** is to transform the practice of structural engineering in a way that is holistic, firm-wide, project based, and data-driven. By prioritizing reduction of embodied carbon, through the use of less and/or less impactful structural materials, participating firms can more easily work toward net zero embodied carbon structural systems by 2050.

***Contractors Carbon Commitment** addresses the following categories: carbon reduction, jobsite wellness, waste management, water management, and material selection.

