

WEBER THOMPSON



Sustainability Action Plan

2016 - 2020



225

Thomas St
Terry Ave N

225

HOLMSTON LENSES

Executive Summary

It is no coincidence that “2020” represents clear vision. The next five years are pivotal to Weber Thompson and the architecture industry.

By the year 2020, we will have crossed the next threshold in the 2030 Challenge targets – new construction must achieve an 80% reduction from baseline energy use. Along with this leap in targeted building performance, a generational shift is in full swing – in the year 2020, Generation X will begin to turn 55¹, and millennials will make up a solid majority of the workforce.² Along with this generational shift comes a strong demand for ecological and systems thinking, and for increasing meaning and purpose in our work. If current trends hold, fossil fuel independence, ecological sensitivity, healthy living, transparency, and equity will become the new norms – not just for “green building,” but the construction industry as a whole.

The specific charge to Architects, as voiced in the AIA 2012 Code of Ethics and Professional Conduct, is clear:

CANON VI: OBLIGATIONS TO THE ENVIRONMENT

Members should promote sustainable design and development principles in their professional activities.

E.S. 6.1 Sustainable Design: In performing design work, Members should be environmentally responsible and advocate sustainable building and site design.

E.S. 6.2 Sustainable Development: In performing professional services, Members should advocate the design, construction, and operation of sustainable buildings and communities.

E.S. 6.3 Sustainable Practices: Members should use sustainable practices within their firms and professional organizations, and they should encourage their clients to do the same.

1. 'Here Is When Each Generation Begins and Ends, According to Facts', Philip Bump, The Atlantic 3/25/14; <http://www.theatlantic.com/national/archive/2014/03/here-is-when-each-generation-begins-and-ends-according-to-facts/359589/>

2. The Numbers Behind Why Millennials Are 'Generation Frustration', Ryan Donegan, Huffington Post 9/24/2013; http://www.huffingtonpost.com/ryan-donegan/millennials-generation-frustration_b_3977145.html

Executive Summary

Where does Weber Thompson see itself in the year 2020? In the firm's 27 year history, nearly fifteen years have been spent emphasizing sustainable design, continuously folding performance into various aspects of practice. We hold ourselves to a high standard, internally and with our clients to deliver healthy and efficient building designs. If we backcast* from 2020, we can identify the issues to address today, knowing we have limited resources and time to accomplish these goals.

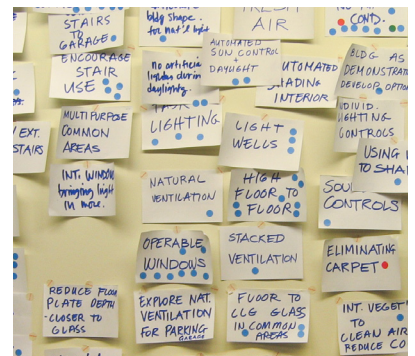
Ambitious goals are not enough; we need a plan. This Strategic Action Plan distills our aspirations gained from about one year of thoughtful brainstorming, workshops, and discussion. The plan crafts them into achievable, measurable tasks, with a road map to get them accomplished.

THIS PLAN PROVIDES THE FOLLOWING:

- Context on the **History** of the green team's activities back to 2003, as background on the firm's foundation for green design.
- In 2015, the re-launch and rebrand of the green team produced a new **Mission & Vision**.
- The **Group Structure** will be described next, i.e. who participates in activities outside of project responsibilities and how layers of involvement throughout the firm support the effort.
- Then, the **Process** – how initiatives are born, brought to the larger team and firm as a whole, and carried out to completion – is described in detail.
- The **Five Dimensions of SustainabilityTEAM** work will be defined and illustrated, each with long-term (five year) goals and stretch goals. The next section will outline Weber Thompson's participation in the AIA 2030 Commitment, with an update on tracking progress, and tools and processes involved.
- We conclude the five-year strategic plan with a brief **Annual Supplement** to address one-year short term goals across the five dimensions. This supplement will be replaced each year (2016-2020) as appropriate.



Catherin Benotto leads an eco charrette for the Terry Thomas building in 2004



Eco charrette dot exercise



The Terry Thomas, 2008

History

WT has a strong connection with the modern green building movement. Beginning in 2003, under the leadership of Catherine Benotto, the firm built a robust sustainability-focused group known as the Green Team. WT became a member of USGBC and embraced and supported LEED while building knowledge and expertise around green certification, green strategy and implementation in design and construction.

The initiatives of this team were collaborative, inclusive and pursued with a great deal of energy and enthusiasm for this work. Nationally, the firm embraced the 2030 Challenge by Architecture 2030, with its heightened responsibility and accountability for architects and ambitious targets for energy performance in design. Our project successes (to incorporate green design and LEED) were supported by a Seattle jurisdiction that began to reward LEED projects with zoning incentives, priority permitting, and resources within various city departments, while raising the bar for energy and stormwater performance to meet code requirements.

The most tangible products of the WT Green Team were the projects that were designed and built. In this period (2003-2008), and the integrative process that moved these projects forward. Blakely Hall was the first Green Globes certified building in the United States and Weber Thompson's first LEED certified building. The Terry Thomas in Seattle was recognized nationally by AIA, ASHRAE, and other industry organizations for its innovations beyond LEED while also achieving LEED Core & Shell Gold. 1521 2nd Avenue was a LEED NC Silver high-rise and shining example of the city's support of LEED through the land use code. South Lake Union, a 350-acre urban neighborhood, was certified as a LEED ND Pilot in 2011.

To support the LEED certification and general green building knowledge, the firm encouraged and supported staff to become LEED accredited. The firm also required this for principals, who collectively took and passed the exam in 2006-2007. Staff who

SUSTAINABILITEAM HISTORY OVERVIEW

WT GREEN TEAM BORN, 2003

WT BECOMES MEMBER OF
USGBC

INTEGRATED DESIGN PROCESS
INTRODUCED, 2003

BLAKELY HALL 1ST GREEN
GLOBES CERTIFIED BUILDING

THE TERRY THOMAS
NATIONALLY RECOGNIZED
FOR LEED INNOVATIONS, 2007

FIRM PRINCIPALS PASS LEED
EXAMS, 2007

NATIONAL TALENT DESIGN
COMPETITION WINNER, 2008

WT SIGNS AIA 2030
COMMITMENT, 2011

2015 WT NAMES MYER
HARRELL, DIRECTOR OF
SUSTAINABILITY

NEW GREEN TEAM CREATED:
WEBER THOMPSON
SUSTAINABILITEAM, 2015

WEBER THOMPSON GREEN AWARDS & RECOGNITIONS

USGBC NATURAL TALENT
DESIGN COMPETITION, 1ST
PLACE (2008)

AIA SEATTLE HONOR AWARDS,
COMMENDATION FOR TERRY
THOMAS (2008)

AIA COTE TOP TEN GREEN
PROJECTS, TERRY THOMAS
(2009)

COOPER HEWITT
SMITHSONIAN DESIGN
MUSEUM, WHY DESIGN NOW?
EXHIBIT (2010)

ARCHITECTURE AT ZERO,
HONOR AWARD FOR
CONSPICUOUS CONSUMPTION
(2015)

ARCHITECTURE MAGAZINE
ARCHITECT 50 / 23RD IN
SUSTAINABILITY (2016)

became LEED Accredited Professionals also self-selected for additional work with the Green Team.

Additional successes of the Green Team included internal staff resources, such as the Project Manager Toolkit, a step-by-step guide custom tailored for WT project managers outlining how to apply LEED principles and documentation to projects. Eco-charrettes, a new format for sparking the Integrated Design Process (IDP) and incorporating creative solutions to build greener and more efficient buildings, were introduced in 2003 and advanced to become common practice for our LEED projects. The Green Team researched and catalogued case studies of projects outside the office that we found inspirational and could draw lessons from, as well as case studies within our portfolio to support the marketing effort.

Other Green Team activities built excitement with a larger audience within the firm. The Green Bulletin Board posted news in the green building industry and relevant events. The Green Book Club stretched our thinking with discussions around Biomimicry, resilience, and material health and transparency. An Office Operations team tracked our carbon footprint, and offered recommendations to offset our footprint, including alternate commuting options, tree planting events, green power purchasing and carbon offsets. The Sustainability Management Team provided leadership and strategic direction for all of these activities.

The US economic downturn, also known as the “the great recession,” from December 2007 to June 2009, with after-effects felt in the construction industry until 2012, was not kind to the WT Green Team. With many projects on hold, and others taken only to the feasibility/concept phase as developers were unable to secure lending, few opportunities arose to implement these great ideas into fully designed and built projects. It became increasingly

difficult to support research and ancillary activities (outside of billable work and direct marketing and proposals) to build up knowledge and green strategy within the firm.

However, in the midst of the downturn, Weber Thompson continued to deliver LEED projects, building on the success of the Terry Thomas Building (completed in 2008). Research in building performance and innovation in urban agriculture were the outgrowths of winning a design competition in 2008, The National Talent Design Competition, hosted by the USGBC Emerging Professionals.

WT became a signatory of the AIA 2030 Commitment in 2011, marking an internal effort to track our design portfolio, with the goal of improving our practice and projects toward the 2030 Commitment goals. Meanwhile, the City of Seattle continued to raise the bar with incentive zoning for LEED projects and measures such as the Living Building Pilot Program. These jurisdictional requirements kept LEED certification as an owner requirement for many projects, even without the necessary local market pressure for the certification itself. Some of the first projects to “thaw out” after the recession were very green projects, which helped us focus our efforts. Sunset Electric, along with multiple high rises that took advantage of the City incentives to reach LEED Silver.

From then, a kernel of resurgence in green building activities built into a groundswell of activity, and in Spring 2015, the new green team was born. After the initial visioning, planning and naming, the launch of the Weber Thompson Sustainability TEAM (WTST) was announced. Naming a Director of Sustainability in 2015 reinforced the firm’s ownership commitment to provide resources to this endeavor.

WEBER THOMPSON GREEN PROJECTS

SWEETWATER (LEED ND certified)

TERRY THOMAS (LEED C&S Gold,
Platinum CI)

VIKTORIA (LEED NC Certified)

SUNSET ELECTRIC (LEED Homes
Platinum)

FIFTEEN TWENTY-ONE SECOND
AVENUE (LEED NC Silver)

THE POST (LEED NC Certified)

TRUE NORTH (LEED NC Silver)

SOUTH KIRKLAND TOD (targeting
Built Green 4 star, Evergreen Sustainable
Development Standards, King County
Sustainable Infrastructure Score Card)

PREMIERE ON PINE (LEED NC Silver)

CIRRUS (LEED NC Silver)

DATA 1 (LEED C&S – registered,
targeting Gold + Salmon-Safe certified)

WATERSHED (pursuing Living Building
Pilot Program + Salmon-Safe certification)



VISION

By the year 2020, Weber Thompson will be an established leader in creating thoughtful, resource-efficient, healthy, equitable and beautiful commercial and multifamily residential buildings at an urban scale.

MISSION

We educate and empower staff to continually improve our practice; enable our clients to construct better buildings, and serve our community by enhancing vitality in our neighborhood, city and region.

We collaboratively challenge the status quo to create enriching, positive environments and develop a credible narrative of financial value through sustainable design principles and processes.

Team Structure

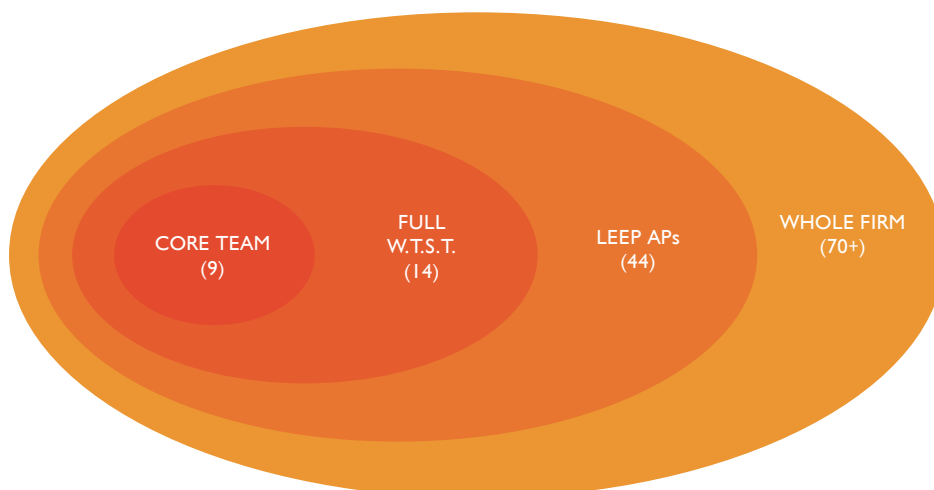
The SustainabiliTEAM (WTST) is organized by the level of involvement by individuals. The Core Team is a highly committed group of 4-7 people (across the spectrum of title/tenure in the firm) who commit 2-4 hours per week in addition to billable work load during a 2-year term. They meet regularly, lead initiatives, and provide steering and strategic direction.

The full SustainabiliTEAM, including the Core Team, is made up of WT employees who self-select, commit to 1-2 hours per week, and re-commit every year in 1 year terms. They join task groups led by the Core Team members to move initiatives forward. The full team meets once per month, generally in a workshop format, focused on a current issue or initiative to provide early feedback and launch or refine an initiative as outlined in Process.

The next layer is formed by LEED APs, made up of LEED Green Associates, legacy LEED APs, and LEED APs w/ specialty (generally BD+C, ID+C,

Homes for WT). This group, in passing the LEED exams and maintaining their credential, have self-selected with a baseline interest and commitment to green design and construction. Other green accreditations are recognized by the firm as valuable, but are not held by WT employees as of the beginning of 2016. The LEED AP group is included in broader communications, engaged by the Core Team and SustainabiliTEAM as needed to answer questions and provide feedback as needed, but does not commit a specific amount of time outside of project work to the WTST efforts.

The whole firm (65-70 employees) is engaged through regular updates at all-office meetings, email announcements, and participation in initiatives such as AIA 2030 Commitment tracking, surveys and pilot projects. The whole firm also participates in Education and benefits from sustainability Project Support provided by the WTST.



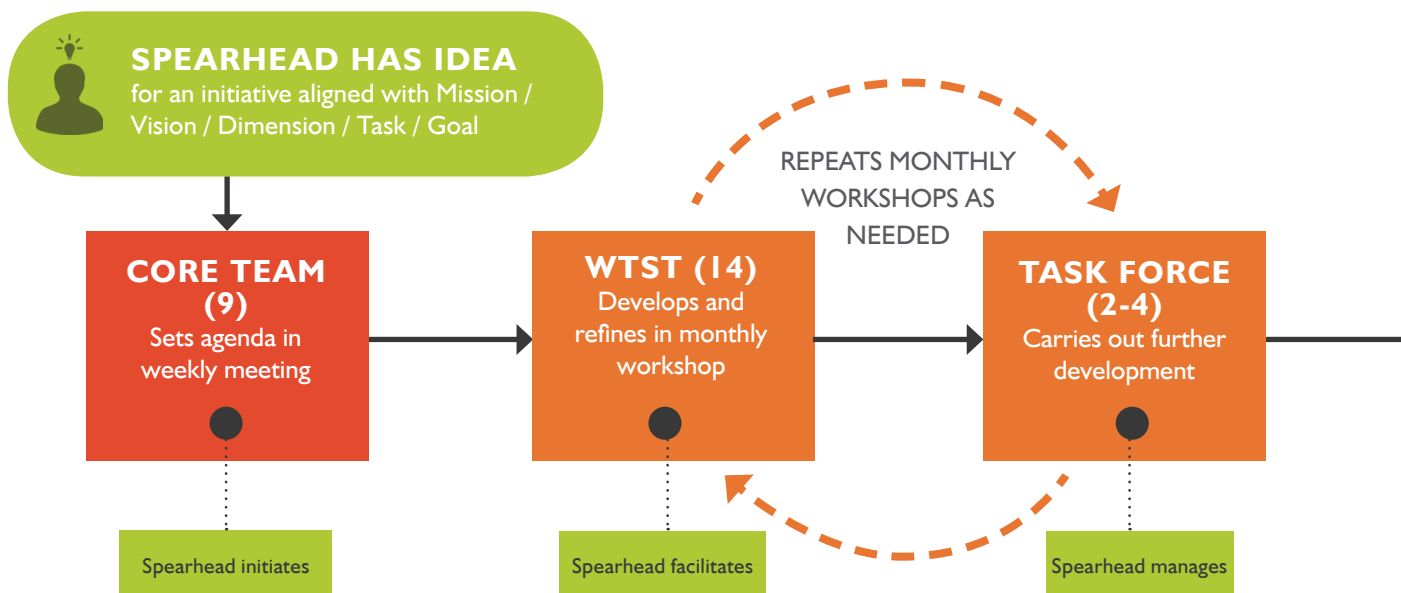
Process

Initiatives generally originate within the Core Team, identified as high-priority tasks toward our common vision. Once an initiative is identified, one Core Team member spearheads the initiative, and then prepares a workshop for the whole SustainabilityTEAM. That workshop is designed with the intent of consulting with the team as a brain trust to identify opportunities, obstacles, and generate ideas for implementation. Workshops are ninety minutes, held once a month, on a regular schedule. Each workshop agenda varies, but has a similar basic format: an initial presentation to provide background to a problem or question, and then an active work session. The active session uses breakout groups and report out, or facilitated brainstorm.

Additional WTST members volunteer to support the Core Team Spearhead, with some coaching and oversight by the Director to guide and reinforce alignment with other initiatives. The Core Team Spearhead then summarizes and formalizes the initiative proposal, with additional analysis which includes time, budget, and other resources needed to achieve the desired end result. Individual initiatives can vary in length of time to execute. Some initiatives – like 2030 Commitment tracking – will have short term aspects of process improvement, but are also ongoing annual efforts.

PROCESS DIAGRAM

LIFE OF AN INITIATIVE FROM IDEATION TO IMPLEMENTATION



SAMPLE QUESTIONS TO ADDRESS IN AN INITIATIVE PROPOSAL:

Describe the Initiative in detail:

- *What is your problem statement?*
- *What do you intend to happen when you complete the Initiative?*
- *How will you measure success of the Initiative?*

How does this Initiative help Weber Thompson achieve the **WTST Vision**?

Which of the **Five Dimensions** does this Initiative best fit within?

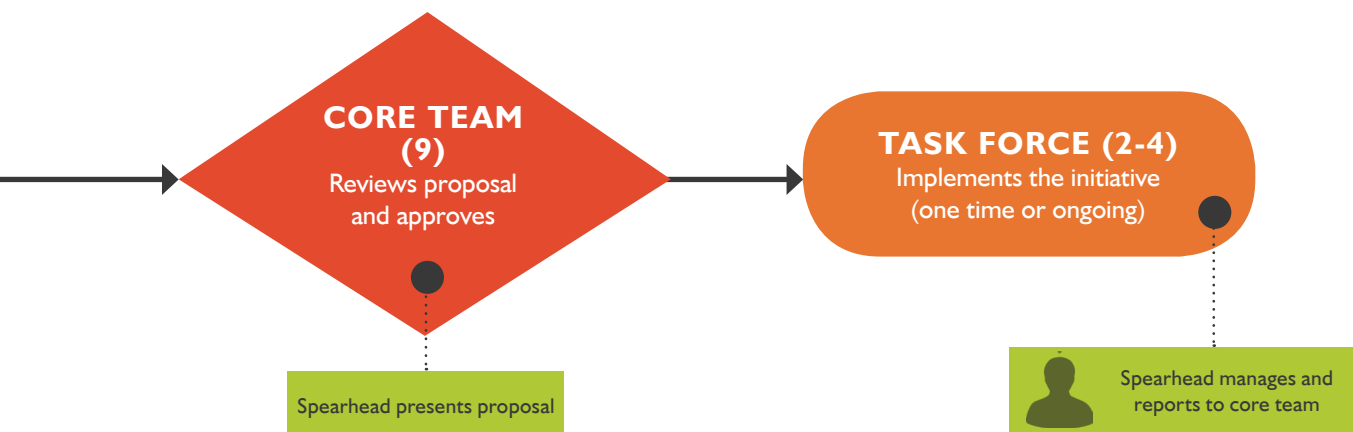
What is the proposed **timeline** from beginning (WTST workshop) to end (summary findings and report)? Provide calendar dates if possible.

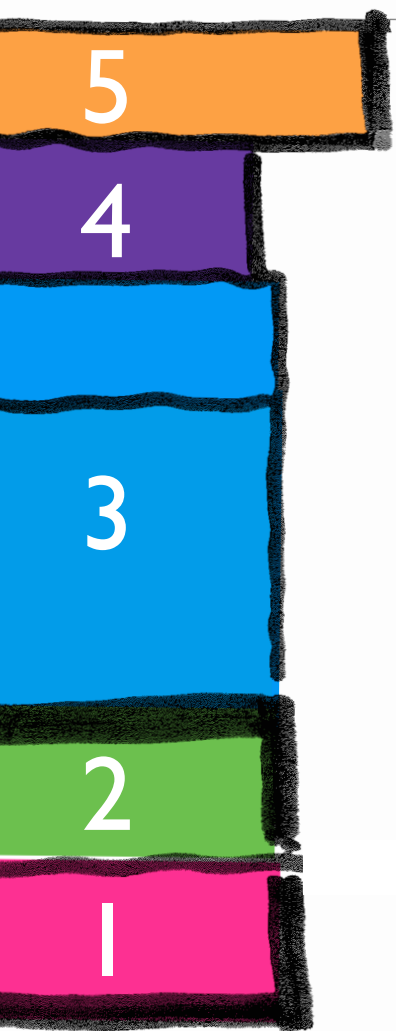
What is the anticipated **staff time** required? Hours per week and number of employees.

Are there any anticipated **costs**? List as line items and total.



Our monthly Pin-Up Studio discussions include ways to integrate sustainable design features





MARKETING

RESEARCH

PROJECT WORK

OFFICE OPS

EDUCATION

Dimensions

FIVE DIMENSIONS OVERVIEW

In the early planning phase of the SustainabiliTEAM launch, while developing the mission and vision, ideas on the strategic efforts to achieve the vision by 2020 coalesced around categories of work we call Dimensions. Nearly every initiative we dreamed up could be captured in one of five Dimensions. This has become a helpful lens to set long term goals, identify challenges, and give each initiative a categorical home. The Dimensions follow a natural order, and can be mapped into the metaphor of the strategic action plan as a building.



Education

DIMENSION I

If the Strategic Plan is a building, Education is the foundation – a prerequisite to any other strategic efforts in the firm.

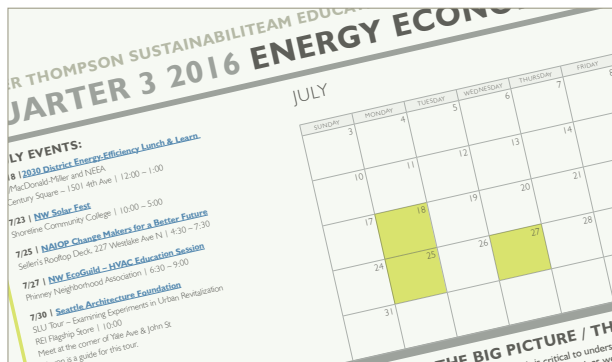
Sustainability Education is important, for employees that are new to sustainable design and want to build their baseline understanding, for those that are more experienced and want to continue to build knowledge, maintain their credential, and apply their understanding to active projects, and finally those with an advanced understanding and desire to engage in a sophisticated dialogue. In order to do green design, we need the knowledge to connect the dots between high performance case studies and active projects. It is important that not just the most vocal advocates of green design build their knowledge base, but that the whole firm participates and builds that knowledge. This is especially true for project designers and project managers, who have a high degree of contact and decision-making within the design process, and can spot opportunities for innovation.

Since the early 2000s, Weber Thompson began to place value on LEED accreditation, encouraging

and supporting employees studying and taking the exam, and including LEED GA and AP as basic considerations for promotion within the firm. While LEED AP is not the only sustainable building certification – and it doesn't guarantee commitment to sustainable design – it does show a threshold of an individual's determination and interest to understand the basics of the LEED program and sustainable strategies within. It has proven to be a valid litmus test for engagement of employees around green.

OBSTACLES:

There are often unclear expectations around accreditations as they relate to certification; and changing roles and requirements by the certifying bodies. We have noticed some green certification fatigue from project teams and clients. It is also challenging to keep education on best practices current, with a constantly evolving landscape around green technologies. The good news is that the first and best approaches – passive design strategies – are timeless and less difficult to teach and find good resources for.



Calendar of Educational Events



Passive House Assembly Mockup

LONG TERM EDUCATION GOALS	EDUCATION STRETCH GOALS
1 Maintain and update resources and study materials for accreditation exams and credential maintenance. Provide a clear path to accreditation for LEED and other affiliations for WT employees, with associated reimbursable costs, an understanding of how these fit into employee reviews.	a Have a thorough and varied representation of green accreditations at WT appropriate to our project types. In addition to LEED AP, include Certified Passive House Consultant (CPHC), Living Future Accredited (LFA) and WELL AP.
2 Provide regular sustainability education to the whole firm. Make this educational content easy to access, enjoyable and relevant to the needs of the firm and a variety of projects. Encourage continual increase of knowledge at all levels of experience.	a Become a resource for the broader architecture, consultant, and client community, where peers, consultants, and clients approach us to find and receive quality educational content.
3 In addition to receiving content, build aptitude around WT providing educational content at external venues. Attend educational events using the WTST budget. Support the submission of conference proposals and contribute to local, regional, and national educational events (with an increasing number each year).	a Through a clear list of opportunities and a structure to prepare submissions, create an environment where the ‘unusual suspects’ within the WTST feel prepared and empowered to submit session proposals to events and conferences. b Build a reputation where peers and consultants approach us to collaborate on session proposals.



Women in Design Tour of Solis Passive House project, Capitol Hill, 2019



CoreNet Tour of Data I office building in Fremont, 2016



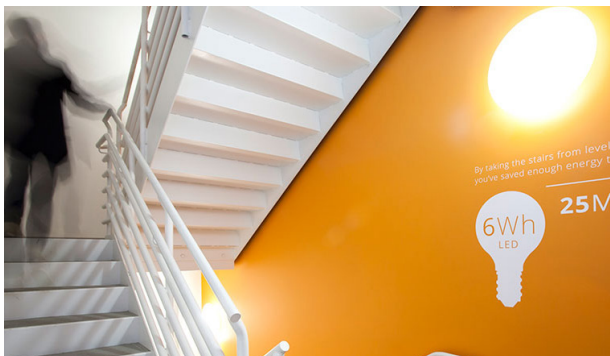
Office Operations

DIMENSION 2

Continuing our metaphor of a building, Office Operations is the ground floor. Our “front door,” so to speak, where our clients, consultants, and collaborators often interface directly with our sustainability goals. It assigns accountability for our firm – if we can’t optimize operational efficiency in our own office, who are we to expect the tenants of buildings we design, and the owners, developers, and builders to strive for the same?

For this reason, and in recognizing that our work and work flow are partially a product of our environment, we see the performance of our space as fundamental to sustainable design. Ideally, through measurement, behavior, and communication, in the office space we inhabit, we embody the high-performance, healthy space that we wish to see in our projects.

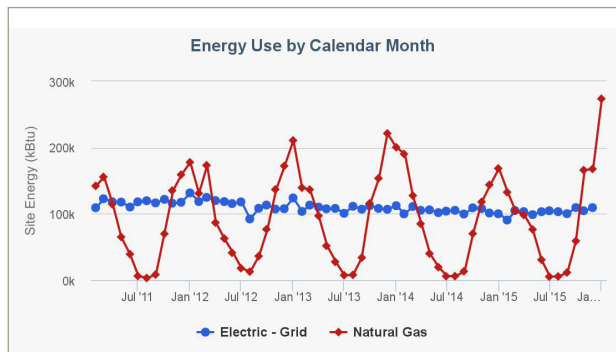
Every time we can point to a feature of the Terry Thomas Building and our office TI to explain or influence a client on a better design strategy, we set the stage for high-performance design. Every time we tour a project team or student group through the space, we offer unique knowledge to industry.



Terry Thomas Wayfinding Graphics Help Educate Tenants & Visitors

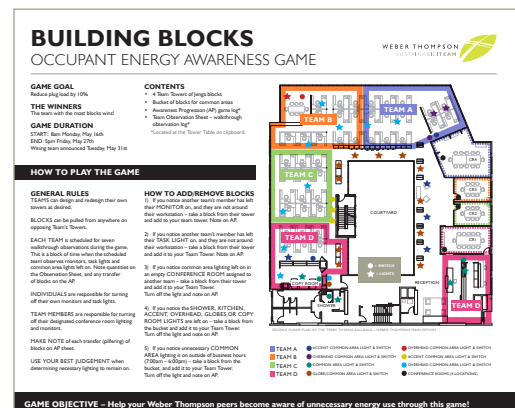
OBSTACLES:

This attention to office operations takes a high level of engagement and participation from the firm at all levels, as well as from property management, and other tenants in the building if we are to be successful in creating a community of performance in the Terry Thomas. It may take changing behaviors, and battling complacency and inertia of doing things the way we have always done them. In a building designed to be high-performance, it can be a heavy lift to ask employees to go above and beyond or take time and energy to participate, respond to surveys, or change their behavior. In the past eight years the firm has become harmonized and nearly synonymous with the building itself – anecdotally some industry peers make the verbal slip of “Weber Thomas” or the “Terry Thompson Building.” As such we take great pride in our space, and that encourages good behavior and gives us a boost!



Terry Thomas Energy Use by Calendar Month

LONG TERM OPERATIONS GOALS	OPERATIONS STRETCH GOALS
1 Reinforce the Terry Thomas' role as a learning laboratory for high-performance office buildings, and showcase as a model for occupant participation and continual improvement.	a Meet the 2030 Challenge in our total building energy use with each incremental five-year target (70% reduction from baseline in 2015; 80% reduction in 2020).
2 Create a framework to measure WT energy use, occupant behavior, occupant health, and carbon footprint that is repeatable and scalable.	a With granular data in hand, submit the Terry Thomas in the AIA COTE Top Ten Plus awards (for projects that initially won a national design award and have proven performance in occupancy)
3 Make Weber Thompson a carbon-neutral office (initially counting only commuting, energy use, water and paper consumption).	a Offset all operations including all travel, waste, and vendor services.
4 Internally and externally demonstrate WT's commitment to employee wellbeing, to promote recruitment and retention. Evaluate the value proposition and viability of providing a third-party certification around employee wellbeing and good business practices.	a Participate in the JUST label or similar program/certification.



Building Blocks – Occupant Awareness game pieces (above) and rules (right)



Project Support

DIMENSION 3

Buildings are the core product of an architecture firm, and Project Support is likewise the core product of the WT SustainabiliTEAM, forming the primary mass of the building in our analogy. The AIA 2030 Commitment is a reminder that until we see positive change in our project performance in design, the real work hasn't yet begun.

How do we make the greatest impact on our projects?

The adage says, “you can’t manage what you don’t measure.” That suggests we must first get a handle on our portfolio through regular project performance tracking, first predicted targeting energy use. Eventually, through the tracking effort, we will embed the tools and processes needed to iteratively test and adjust energy performance in early design phases. We can continually hone the accuracy of our predictions through collaboration with engineers and refined modeling assumptions, until design phase energy modeling becomes a part of our basic services and strengthens our dialogue with consultants.

With portfolio tracking and design phase energy modeling up and running, we wish to “move the needle” on all of our projects, stretching toward ever higher performance goals. Every project is unique, and every client and project team has different motivations for pursuing sustainable strategies and certifications. Through process improvement in design, project management, technical implementation, drawing and model production, and client management, we will find ways to influence every project for the better.

OBSTACLES:

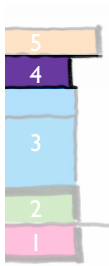
Firm profitability is somewhat based on the ability to repeat processes and design aspects from one project to the next. We cannot afford to reinvent the wheel every time, and the benefit of a mid-size firm is in the ability to share resources, knowledge and experience to make the whole of individuals and project teams greater than the sum of the parts. However, as we’ve learned with building codes, accessibility, building science, and evolving market demands, we must be nimble and humble as we continually refine what we consider best practice. The same is true for sustainable design; however it requires a more proactive attitude from architects, as often it is not legal risk or client demands driving sustainable design, but our own internal motivations.

		LEED 2009 for New Construction and Major Renovation Project Scorecard	
Project Name: 970 Denry Way Project Address:		GOAL: LEED Gold	
21 2 2 1	SUSTAINABLE SITES	26 Points	Required
Credit 1	Construction Activity Pollution Prevention	1	Required
Credit 2	Site Selection	5	5
Credit 3	Development Density and Community Connectivity	1	1
Credit 4	Brownfield Redevelopment	1	1
Credit 4.1	Alternative Transportation - Public Transportation Access	6	6
Credit 4.2	Alternative Transportation - Bicycle Storage and Changing Rooms	1	1
Credit 4.3	Alternative Transportation - Low-Emitting and Fuel-Efficient Vehicles	3	3
Credit 4.4	Alternative Transportation - Parking Capacity	2	2
Credit 5.1	Site Development - Protect or Restore Habitat	1	1
Credit 5.2	Site Development - Maximize Open Space	1	1
Credit 6.1	Stormwater Design - Quantity Control	1	1
Credit 6.2	Stormwater Design - Quality Control	1	1
Credit 7.1	Heat Island Effect - Nonroof	1	1
Credit 7.2	Heat Island Effect - Roof	1	1
Credit 8	Light Pollution Reduction	1	1
8 0 0 2	WATER EFFICIENCY	10 Points	Required
Credit 1	Water Use Reduction	2 to 4	Required
Credit 1	Water Efficient Landscaping	2	2
Credit 2	Reduce by 50%	4	4
Credit 3	No Possible Water Use or Irrigation	2	2
Credit 2	Innovative Wastewater Technologies	2 to 4	2
Credit 3	Water Use Reduction	2	2
Credit 3	Reduce by 30%	3	3
Credit 3	Reduce by 35%	4	4
Credit 3	Reduce by 40%	4	4
14 2 0 1	ENERGY & ATMOSPHERE	35 Points	Required
Credit 1	Fundamental Commissioning of Building Energy Systems	Required	Required
Credit 2	Minimum Energy Performance	Required	Required
Credit 2	Fundamental Refrigerant Management	Required	Required
Credit 1	Optimize Energy Performance	1 to 19	1
Credit 1	Improve by 12% for New Buildings or 8% for Existing Building Renovations	1	1
Credit 1	Improve by 14% for New Buildings or 10% for Existing Building Renovations	2	2
Credit 1	Improve by 16% for New Buildings or 12% for Existing Building Renovations	3	3
Credit 1	Improve by 18% for New Buildings or 14% for Existing Building Renovations	4	4
Credit 1	Improve by 20% for New Buildings or 16% for Existing Building Renovations	5	5
Credit 2	On-Site Renewable Energy	1 to 7	1
Credit 2	Enhanced Commissioning	2	2
Credit 4	Enhanced Refrigerant Management	2	2
Credit 5	Measurement and Verification	3	3
Credit 6	Green Power	2	2

LEED scorecard for a high-rise residential project

LONG TERM PROJECT GOALS	PROJECT STRETCH GOALS
1 Become a model AIA 2030 Commitment signatory firm with regular and ongoing AIA 2030 Commitment tracking. Offer valuable lessons to other firms newly signing on or looking to boost their level of commitment. Actively participate in the Seattle AIA 2030 Commitment Roundtable. Use design phase energy modeling in early architectural design phases (feasibility? concept, Schematic Design, Design Development) for all projects where an engineer/energy modeler is not yet engaged, as part of our basic services.	a Use data visualization to identify trends, and identify the prime projects within our portfolio for specific interventions to focus efforts and leverage small actions into large impact. b Participate in Commitment planning and refinement at a national level.
2 Establish a process for in-house energy modeling for AIA 2030 reporting that is seamless with WT project workflow.	a Train at least one project team member for every project in the office that can use energy modeling to immediately model projects as needed.
3 Use design phase energy modeling in early architectural design phases (Feasibility, Concept, Schematic Design, Design Development) for all projects where an engineer/energy modeler is not yet engaged, as part of our basic services.	a Demonstrate WT leadership in design phase energy modeling. Include comparative EUIs in all EDG/Rec packets and presentations. Submit WT case studies to Sefaira.
4 Establish a WTST task force that can assist all projects in the office, no matter what level of green. Focus on Concept Design and Schematic Design phases.	a Maintain firm-wide awareness of this internal resource. Build a catalog of “success stories” of WTST involvement on projects.
5 Evolve WT into an early adopter or early majority* when new sustainable certifications and processes are introduced.	a Make WT known as a Seattle market leader for one particular green certification.

*Reference the technology curve, or customer segments of technology adoption; see *Diffusion of Innovations*, Rogers and *Crossing the Chasm*, Geoffrey Moore



Research

DIMENSION 4

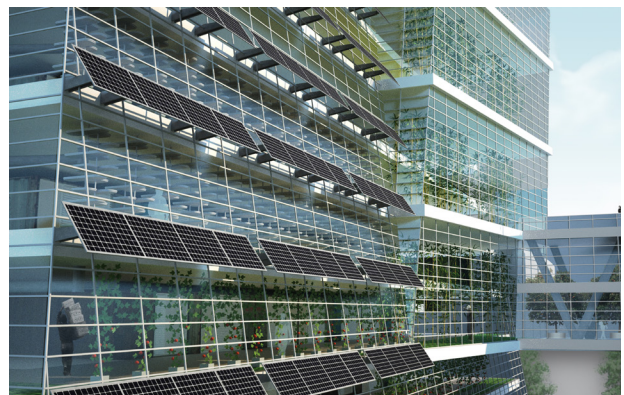
Research is the loft story above the primary building. Innovation cannot always come from the confines of standard project delivery with its tight schedules, ambitious development objectives, and ever-decreasing margins for cost. In order to nudge ourselves out of our comfort zone, the firm needs the equivalent of a Research & Development (R&D) laboratory – to test conceptual ideas, new processes and technologies that then filter into cutting-edge projects with the hope of eventually influencing our entire portfolio. These research initiatives are like concept cars for the auto industry – the complete ideas may not have mass appeal and application, but certain aspects can be borrowed when appropriate to challenge us and improve our projects.

OBSTACLES:

The impediments to research are many. A lack of non-billable time and funding to devote to research activities being the most prominent. A lack of experience with research rigor that is expected in scientific and academic settings makes for research projects that are less replicable, scalable, and relevant. The former can be addressed with clearly defined research initiatives and by applying for grants offered by industry and government, and good project accounting that allows us to take advantage of federal tax credits for private industry research. The latter can be addressed by partnering with individuals and institutions with credible research experience, that we can supplement with real-world experience to make a stronger proposal for research that has wider applicability.



Architecture at Zero Competition Rendering



Ecolaboratory Competition Entry for Living Building with Vertical Farming

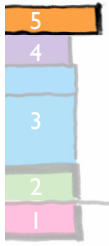
LONG TERM RESEARCH GOALS	RESEARCH STRETCH GOALS
1 Demonstrate industry thought leadership and insight with innovative research from WT's position within the design / development community. Make this work publicly available, and use this research to pursue new projects and project types.	a Form or join a team selected for a funded research project. Create a template for an annual research project with our UW summer intern.
2 Build expertise and internal efforts around Materials Transparency (aligned with AIA). Have clear labeling in the WT library for products that clearly communicate health and transparency of materials information, and clear direction on preferred and discouraged products. Also, develop a questionnaire for PM/PA inquiries to a product rep.	a Share processes/policies that WT has implemented around materials health/transparency with the architecture & interior design community.
3 Enter competitions with building performance / green building as a focus, aimed at expanding our portfolio, practice and design process to incorporate sustainable strategies.	a Win awards in competitions, with cash prize offsetting costs to participate. Leverage awards into press and accolades into marketing collateral.



2012 Cross-Laminated Timber Case Study



Rooftop Greenhouse Study



Marketing

DIMENSION 5

At the top of our strategic plan, marketing is the sculptural roof, visible from far and wide. It is our way of communicating with the broader general public, including future clients and collaborators.

Simply put, we want to do good work, and then show the world the good work we have done in order to do more.

OBSTACLES:

Marketing can be seen as a task for after the project is done; but the truth is that it can happen at any time during a project, and between projects. The key is recognizing marketing opportunities that are most effective for building a sustainable design portfolio, and actively seeking them in unconventional places. Marketing can lose momentum when continued efforts don't see immediate and direct results. The key to addressing this is to adapt and continually refine the plan and types of activities we pursue.



Healthy Materials Collaborative Panel Discussion at Weber Thompson, 2017



NAIOP Changemakers event, 2017

LONG TERM MARKETING GOALS	MARKETING STRETCH GOALS
1 Increase WT's presence as a reliable expert in green building through well-timed articles, print features, and regular WT blog posts. Support article writing with a WTST writing circle or editorial committee.	a Write or interview for (1) article or feature per year in a national publication. b Be recognized in the Architecture Magazine Top 50 firms, highlighting sustainable design.
2 Build and maintain WT's participation in the sustainable building 'speakers' circuit'	a Contribute to one speaking engagement at a national-level conference or event each year.
3 Find aligned causes and initiatives to advocate publicly. Increase WT's visibility as an advocate for environmental causes.	a Champion a particular cause within green building at city and state level; attend hearings, lobby, and help craft legislation.



Sustainability Slam featuring our Pike Passive project | Seattle, WA, 2016



Passive House Northwest Conference | Portland, OR, 2019



Metropolitans Perspective: Sustainability symposium | Seattle, WA, 2019

AIA 2030 Commitment

TRACKING PROGRESS

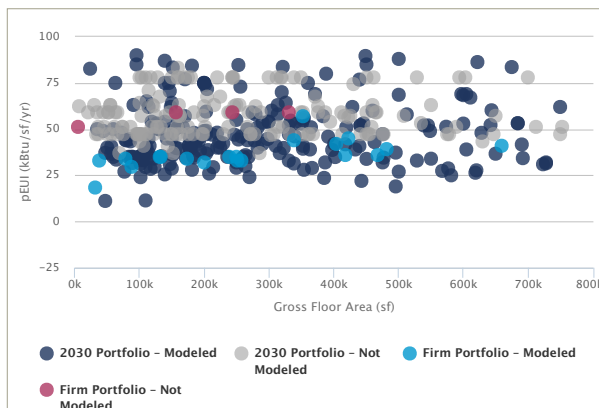
In 2011, Weber Thompson signed the AIA 2030 Commitment, and began tracking its design portfolio's predicted energy use and submitting whole-portfolio data to AIA annually.

In the first few years we found (as did many firms) that a large portion of our projects – because they did not have an early design phase energy model – defaulted to the predicted EUI based on the Washington State Energy Code (a broad and crude measure of project performance in relation to a baseline). In fact, enough projects defaulted to the the code reduction that the summary report that our whole portfolio seemed to track with the number chosen by AIA as the average reduction from baseline. More than any other aspect of tracking, we knew this lack of an early design phase energy model was the “low-hanging fruit;” the first step to improving our firm in this regard. It also became clear that the 2030 Commitment

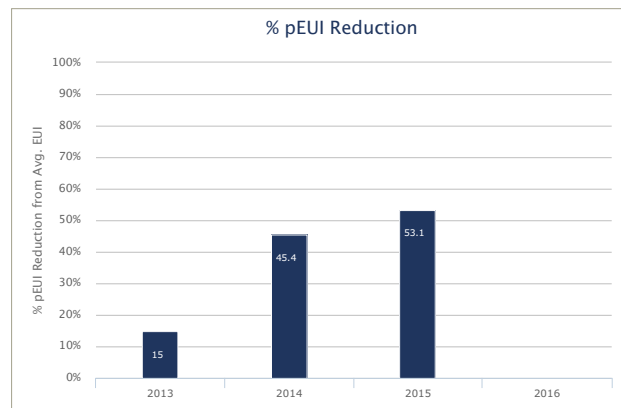
could be the impetus to build competence with an early design phase energy model. Once we established portfolio tracking, the same energy modeling process could soon be used to influence our projects.

The end goal is to make 2030 Commitment tracking less of a once a year data audit, and more of a continual process, embraced by project managers and used by project teams as a tool to set design criteria.

More focus on interiors-only projects should also be part of this effort; they lag somewhat behind as it is much rarer for these projects to have a predicted Lighting Power Density (LPD). These projects also tend to be more geographically diverse, which means jurisdictions that require less detail in code compliance documentation than Seattle.



2015 AIA Commitment report



Percentage pEUI Reduction from Average EUI

AIA 2030 Commitment

PROJECT MANAGER 2030 WORKSHEET

This worksheet was created directly from the online DDX platform for AIA 2030 Commitment tracking, as a way to quickly and efficiently gather project information from project managers. Its first use was for 2015 tracking in early 2016. The first page requests basic project information, with pages two and three for optional additional information. This format was created with the desire to make

it simple and easy to report. On page one there are additional prompts to gather information that provides useful tracking data to Weber Thompson but is not included in the AIA DDX inputs, including project owner, number and type of residential units, and internal notes on project contacts and energy model detail.

2030 commitment survey for PMs	
Reporting Year 2015	
<u>General Inputs (Minimum Required Info)</u>	<u>Notes</u>
Project Name _____	
WT Project Number _____	
Project Category _____	Residential / Non-Residential / Interior (Hotel is considered Non-residential)
Gross Square Feet _____	conditioned area only, exclude parking, separate mixed use into primary types
Residential Units _____	#, indicate if hotel or condo
Project Phase _____	Concept, SD, DD, CD, CA, or Occupied
Year of Occupancy _____	(rough estimate based on construction schedule)
Zip Code _____	
Target Certification _____	(LEED Certified, Silver, Gold, Passive House, etc.)
Status of Energy Model _____	Has been modeled / will be modeled / will not be modeled
Design Energy Code _____	(ASHRAE 90.1 2010 , Seattle Energy Code 2012)
Responsible Party for Energy Model _____	(typically Engineer, sometimes Architect or Consultant)
Energy Modeling Tool _____	(typically eQuest for RS-29; confirm with Engineer / IES / Sefaira if done in-house)
Predicted EUI _____	(from engineer -- RS-29 report, LEED EAc1 report, or SEC Total Building Performance Model)
EUI baseline _____	(use Energy Star Target Finder to establish)
<u>Additional Inputs</u>	
Lighting Power Density _____	(if an interiors-only project)
Renewables _____	PV / solar hot water / wind / geothermal
Window to Wall Ratio % _____	(typically also needed for SEC compliance)
Occupancy Sensors? _____	(for non-residential)
Daylighting Sensors? _____	(for non-residential)
Tracking Water? _____	if so, indicate: 1. reduction in potable water per LEED 2009 WE p1; 2. Whether only non-potable water used for irrigation (or no irrigation); 3. any water collected for reuse?

Modeling

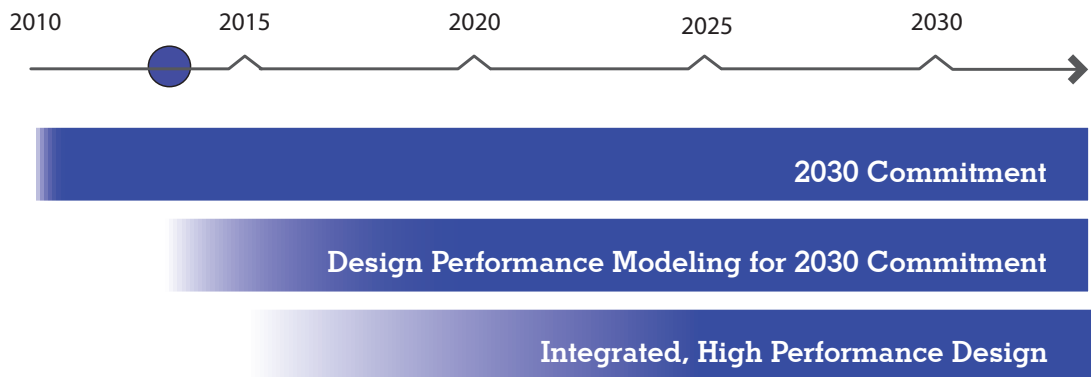
TRANSITION TO EARLY DESIGN MODELING

Beginning in early 2016, after careful study of the current options available in the industry, the Sefaira plug-in for Sketchup was chosen as the preferred early design phase energy modeling tool for Weber Thompson, based on our workflow and goals for the modeling. Six workstations were activated, and the first task was to use Sefaira modeling for AIA 2030 Commitment tracking, to provide a predicted Energy Use Intensity (EUI) for projects that did not have an energy model from an engineering consultant (either because the project did not require a model for code compliance or sustainable certification, or because the energy consultant had not yet been engaged, or because their initial analysis had not been conducted yet).

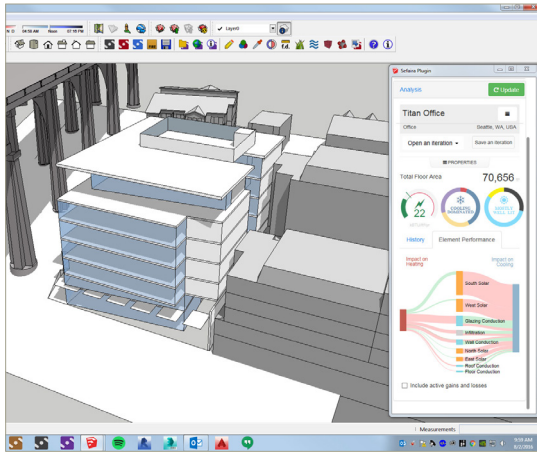
The next application of early design phase energy modeling will be to use models to analyze three massing options for Seattle Design Review for

jurisdictional approval. At the Early Design Guidance (EDG) phase in Schematic Design, three massing options are evaluated for how they respond to context, zoning, and design guidelines. Along with that evaluation we will offer energy performance analysis to supplement the package and presentation. Because the project is early in the design process, the focus of the analysis will be on massing, siting, and orientation.

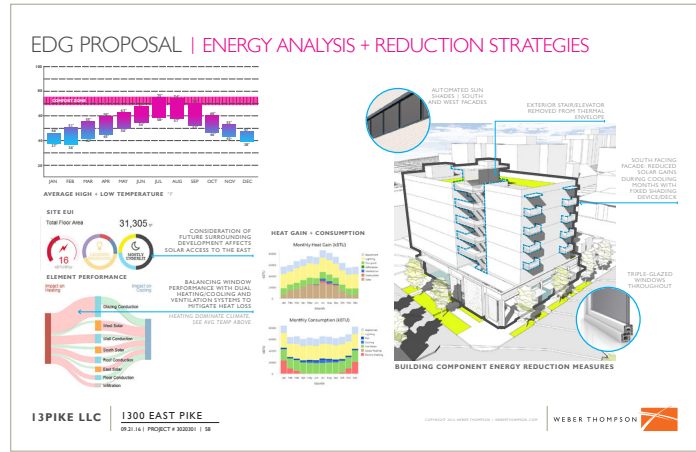
The next step – in the near future – is to add a round of analysis in the design development phase, possibly at the Design Review Board Recommendation stage. To build on the massing, siting, and orientation study in EDG, the team will further iterate the energy model with architectural design and help inform specific design questions and decisions. This can be especially useful to inform glazing and shading, and thermal envelope.



WT Green Team



Sefaira plug-in for Sketchup interface



Early Design Guidance book incorporating energy analysis

01.1. Understanding Your Results

The plug-in, while simple and graphic, provides a lot of useful data for analyzing your model. EUI (kBtu/ft²/yr) is displayed first with a green indicator line that shows the 2030 Challenge target, as well as a simple breakdown of the energy use, your lit vs underlit areas, and at the bottom the history of the model and element performance.

Yellow represents overlit, blue well lit, and gray indicates underlit area %. These numbers represent natural lighting potential based on a percentage of the floor area receiving certain lighting levels over the year.

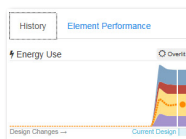
Hovering over the energy breakdown brings up the actual kBtu's per year associated with each energy segment.

Energy Segments	
Heating	301100
Cooling	520598
Lighting	757910
Equipment	372065
Fans	0
Pumps	0

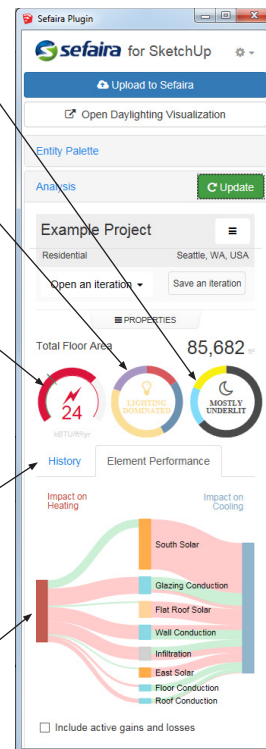
The EUI meter also shows how far off you are for meeting the 2030 targets. If you are under the 2030 goals, this meter turns green. Hovering over the icon again reveals the details of the meter. 2030 Challenge EUI's are set by project type, for instance residential will always be 12, regardless of project size.

Energy Use Intensity	
2030	12
Challenge	24
Actual	24

The history tab shows how your design has evolved as you have worked on it in the current session. For example, after we adjusted the entity types you can see our numbers decreased from the initial peak.



The element performance tab is possibly the most useful visual graphic for making on the fly decisions about the performance of your design. The left side shows positive (green) and negative (red) effects on your heating loads, with the right side showing the same for impacts on cooling in regards to your overall loads. From the current breakdown, we can see the large percentage of southern glazing is creating a lot of heat gain from the south, and impacting our cooling significantly. We could quickly add larger shading elements or higher performance glass to see how that affects this chart. Overall this is a great way to find big picture issues and solutions.



2019 Supplement

2019 is a year for the WT SustainabilityTeam to narrow our focus and limit the number of goals, while providing greater impact, and maintaining our ongoing successful programs and activities. The 2019 Goals (high level ideals) and Actions (strategic activities) are directly tied to the five-year WTST Vision and Mission.

Passive House and Living Building Challenge are the green building certifications which best align with our firm aspirations and project types. This year we strengthen our education, involvement, advocacy, and project integration with these two certification frameworks.

We continue our alignment with AIA and their recent sustainability efforts, including their updated code of ethics, the resolution on urgent climate action, utilization of the COTE Top Ten toolkit, and our continued participation in the 2030 Commitment. We also continue to build capacity for research, partly through participation in the Research Partnership with the UW Center for Integrated Design.

SOLIS

Solis is a condominium project currently under construction in the Capitol Hill neighborhood of Seattle.

The residential portion of the building is pursuing the rigorous PHIUS+ passive building energy certification standard by the Passive House Institute US. It is among the first multifamily condominium buildings in the country to do so.



WATERSHED

Watershed, a commercial office building in Seattle's Fremont neighborhood, will be the only building to pursue the 2014 version of Seattle's Living Building Pilot Program (LBPP), and the third building overall to pursue the program. Anticipated completion in January 2020.



Vision

Mission



- MARKETING
- RESEARCH
- PROJECT WORK
- OFFICE OPPS
- EDUCATION

- MAINTAIN PREVIOUS ONGOING EFFORTS
- NEW ACTION IN 2019
- SUSTAINABILITY LENS

- HEALTH LENS
- PROJECT LENS
- ENERGY LENS

2019 Actions

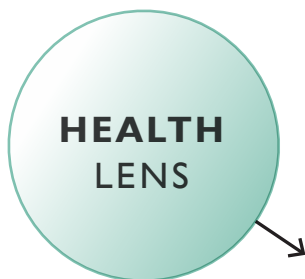
2019 Goals



Sustainability Lenses

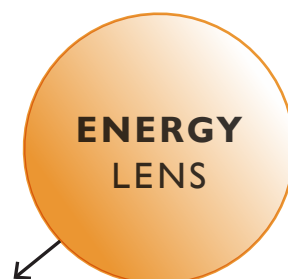
Three of the nine 2019 Actions are further developed as “lenses” – tools for project teams throughout the office to employ for specific needs around sustainable and high performance design.

The Health Lens, Energy Lens, and Project Lens can be used for targeted projects by the WTST or as requested by project teams at any stage of projects.



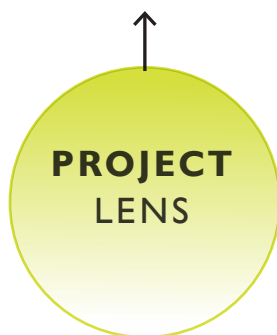
Human health benefits of design strategies, backed by science

2019 ACTION:
Beta-test the Rosetta Stone for CID Research Partnership



Energy and daylight performance analysis as a design input

2019 ACTION:
Establish protocol for 2030 & design energy modeling



Improve building performance in multiple ways, no matter what level of green

2019 ACTION:
Use the AIA COTE Top Ten framework to evaluate projects

WEBER THOMPSON

SustainabiliTEAM



Core Team

WEBER THOMPSON
SUSTAINABILIT**EAM**



Full WTST