Scalable Climate Action

Contents

Executive summary

Introduction

This report represents the work of the Scalable Climate Action Group ("the Group") of the AIA Strategic Council. The report includes a summary of the research and observations from a four-month effort based on the following charge:

The Scalable Climate Action Group will focus on identifying how to catalyze a long-term "snowball effect" so that all practitioners are motivated and able to engage in daily climate action through their practice, client work, and communities. This aggregating effect should have a measurable impact on the climate impact of the built environment in the next 10 years.

Goals

- All practitioners: Changes shall be so fundamental that every architect inside and outside AIA will transition to a climate-responsive practice no matter the location, size, or type of practice.

- Measurable impact: An intentional focus on applications will yield measurable results both in architectural practice adoption and in climate mitigation and adaptation.

- Timeframe: The rate of change must occur within a 10-year timeframe. It is understood that there are urgent milestones to address in the next few decades in order to meet both regional and global climate mitigation targets.

Process

The Group initially identified what it believed were the levers of change (LOC) that addressed the Group's charge, followed by an examination of these levers within and outside AIA's sphere of influence. Interviews were conducted with key AIA staff, AIA members, committee leaders, and leaders in the insurance, government, investment, and public service sectors.

Given this initial research, the LOC were prioritized using two parameters:

- the potential overall climate impact; and

- the achievability of the AIA's role in effecting change.

Each LOC in the report describes the specific challenge, proposed premise, pertinent background information and/or definitions, current state of relevant AIA actionable strategies, and specific proposed actionable AIA strategies spread over a 10-year timeline.

Each LOC is accompanied by a detailed road map that graphically describes a "backcasting" scenario with specific milestones across time and scale, identifying measurable impacts encompassing the individual practitioner, the firm, and the component.

Recommendations

Defining Research Priorities - Survey Results

Implement

Actions where current activities, initiatives, and resources are robust, and opportunities are ripe for results. It is this group's opinion that these should be considered for integration into near– and longer–term planning by AIA groups working in these areas.

- Carbon literacy: 94,000 architects as carbon literacy leaders

- Environmental, social and governance (ESG) investments: Every climate issue is an economic issue

- Government action: Research and advocacy

- AIA Code of Ethics and Professional Conduct: Use the full force of AIA's standards

Explore

Actions where additional research may be warranted to identify greatest opportunities, partnerships, and strategies to move forward. The Group observed that AIA committees and Knowledge Communities, for example, working in these areas, as well as the Strategic Council, may consider these for additional focus.

- Public architects: Use alternative career paths to impact climate action

- Contract documents: Use the full force of AIA's standards

- Government action: Accelerate funding and legislative/regulatory climate drivers

- Professional liability: Adapt the standard of care to respond to a changing climate

Conclusion

The Scalable Action Group, supported by the Strategic Council, suggests that AIA has an obligation to fulfill its commitment to create a significant impact within the climate action agenda, not just for our profession but for our communities and neighbors, and has identified specific efforts that could create an ever-increasing rate of change with measurable impacts. This report addresses both changes to implement in the short term, as well as levers of change that contribute to a more long-term impact. This will ultimately result in measurable improvement for the future of the profession and the built environment.

Carbon literacy

94,000 architects as carbon literacy leaders.

Challenge

As a design community of 94,000 members, we have an intuitive and innate understanding of basic building metrics, such as R-values and construction costs. Building energy metrics, such as energy use intensity and air tightness, have become more common but are not yet universal in the industry.

However, as a design community, we are illiterate with respect to understanding and being able to communicate carbon metrics x—both operational and embodied—to our clients. A small number of professionals are quite capable of doing so, but the Group's perspective is as an organization we are not there, and we must be.

Let's take a test. Do you know:

- The MPG rating on your car? The miles per kWh if electric?

- The cost of your electricity bill per month? The kWh per day?

- Is an R4 total wall assembly a good wall?

- The average cost per square foot of a typical house?

- Is a building with a peak heat loss of 10 BTU/sf/hr a good building?

- Is a building with an infiltration rate of 0.1 cfm/sf shell at 75 pascals good or bad?

- Is an EUI of 40 BTU/sf/year good for an academic science building? Is it even possible?

- Is 221 kg CO_2e/m^2 a good metric for embodied energy? What does it include?

How did you do? Have you ever been asked these questions?

Premise

- Architects need to be fluent and competent about operational energy and embodied carbon when working with our clients in the coming years. Our design leadership is fundamental in developing projects within financial budgets. We must do the same with carbon—as a budgeted item to be reconciled and understood.

- What if AIA created a new credential for members that promoted their carbon literacy?
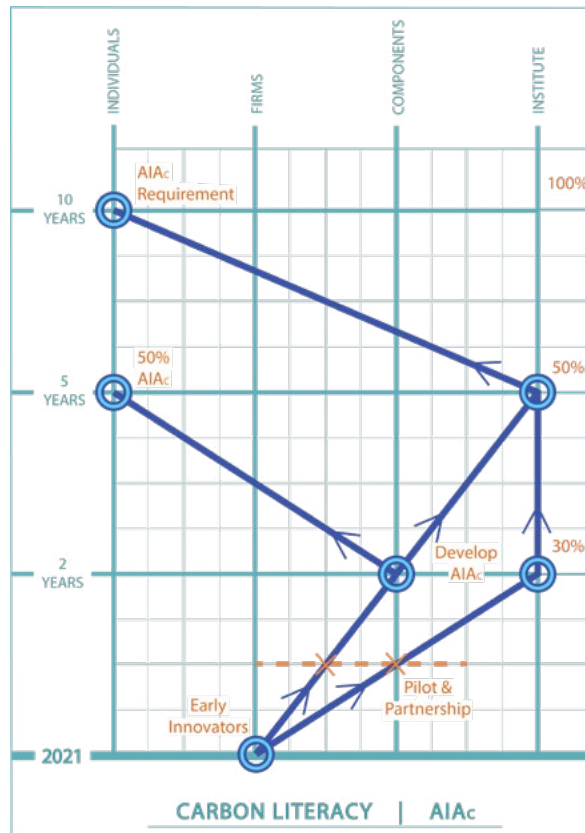
Current AIA actionable strategies

Existing opportunities for individual training and education can be taken advantage of now. The idea is to scale this up for all members of AIA.

- AIAU offers a AIA+2030 Online Series Certificate Program.

- AIAU recently released courses on Embodied Carbon 101 developed by the Boston Society for Architecture.

- AIA shared new design tools and networks to address embodied carbon.

- AIA offers a guide for addressing climate action with clients and communities.

Roadmap

Suggested AIA actionable strategies

Years 1–2

- Consider a specific credential for carbon literacy, in conjunction with the Carbon Leadership Forum.

Year 5

- 30% of AIA members strive to achieve this credential.

Year 10

- The credential is a requirement of membership.

Conclusion

Carbon literacy should be a requirement for all practicing architects to bring value and relevance to our work. "220, 221—Whatever it takes…" is not an appropriate response when it comes to carbon. Our clients will seek other advice on operational and embodied carbon if architects are not fluent on the topic.

Environmental, social, and governance investments

Every climate issue is an economic issue.

Challenge

The long-term benefits of investments can impact the daily actions and decisions by AIA and its members. By embracing environmental, social, and governance (ESG) investing, AIA could cause a ripple effect inside and outside the profession.
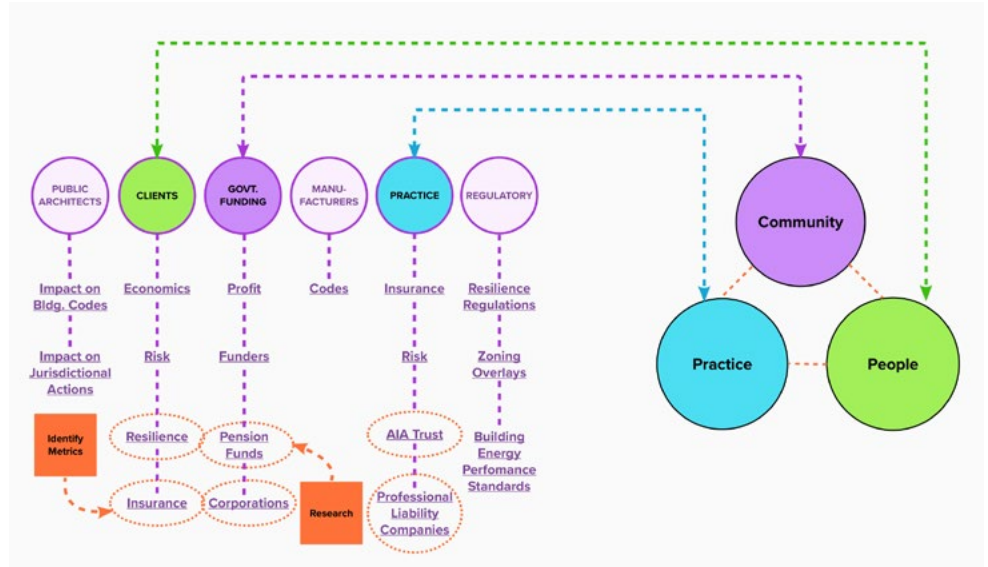
Premise

Socially responsible investments have been around for years, and financial experts confirm that they are becoming more relevant with each passing day. Recently the AIA Board of Directors adopted sustainable investment strategies based on ESG criteria. If this strategy was adopted at every level within AIA—not only AIA national, but also at Architects Foundation, AIA Trust, all components, firms, and even individual members—the impact would have a measurable effect on climate action and demonstrate the power of a unified set of professional values.

Background

ESG issues were first mentioned in the 2006 United Nations Principles for Responsible Investment (PRI) report, which included the Freshfield Report and "Who Cares Wins." ESG criteria was, for the first time, required to be incorporated in the financial evaluations of companies. This effort was focused on further developing sustainable investments. In 2018, according to the Global Sustainable Investment Alliance, ESG investments accounted for $30 trillion and over the next two decades could increase to $50 trillion, creating measurable support for a real shift in attitude toward climate change. According to research by Morningstar, the growth in ESG investing is skyrocketing—U.S. investors invested in ESG funds at a pace double that of 2019. Further, 49% of new commitments to science-based targets in the past five years were made in 2020 alone.

Definitions

Environmental, social, and governance (ESG): A system of criteria related to the environment, social equity, and governance practices that measure how investments can be scored. Here are the three ESG factors and what they each entail:

- **Environmental**: Environmental factors include how a company mitigates its greenhouse gas emissions, whether the products the company creates are sustainable, if it uses natural resources efficiently, and how it deals with recycling.

- **Social**: The social component includes factors both inside and outside the company. Does the business participate in community development, such as providing affordable housing or fair lending? Does it carefully consider diversity and equal employment opportunity in its hiring? Does the company prioritize human rights everywhere it does business, including other countries?

- **Governance**: Governance (or corporate governance) refers to the company's leadership and board, including whether executive pay is reasonable, if the company's board of directors is diverse, and whether it is responsive to shareholders.

ESG and INSURANCE:

The profession is required to have insurance at all levels.

"ESG considerations cannot be overlooked by insurers in today's environment, given the growing prominence of such issues. As awareness of sustainability increasingly influences customer demand and as regulatory attention to this area grows, insurers must ensure their positions on ESG matters are clear and that their strategies, product designs and day-to-day business management are aligned to them. This will be increasingly important not only in order to maintain brand and reputation, but also to remain competitive as customer demand evolves." ESG considerations in the insurance industry report.

AIA can support the insurance industry's use of vehicles that include ESG consideration.

With sustainable investments, foundations can align their investments with their mission and contribute to the foundation's purpose and outreach.
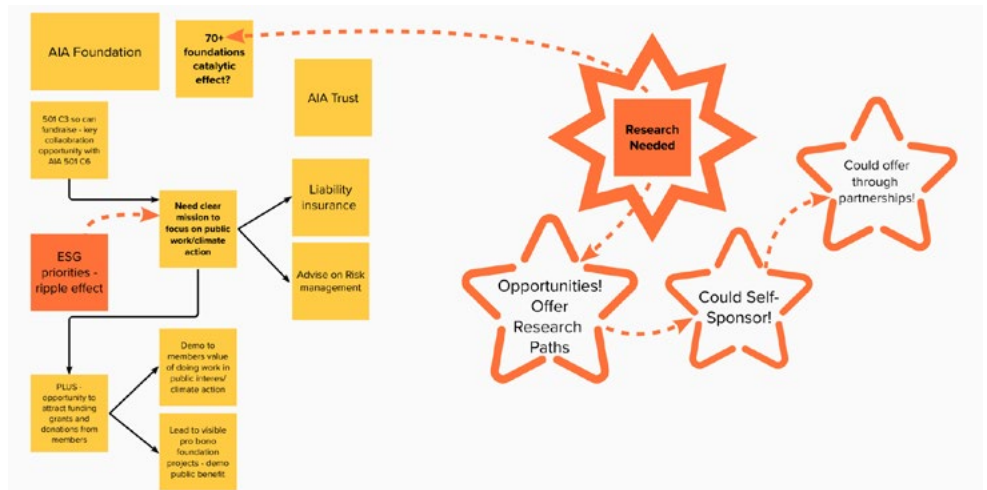
ESG and AIA FOUNDATION:

Bring together sustainability and returns on investment.

Besides a positive impact on the environment and society, inclusion of ESG criteria has financial benefits for foundations themselves: it improves the risk–return profile. There is a positive correlation between companies with high and increasing ESG values and risk-adjusted returns. At a glance, these are the advantages of sustainable investments for foundations.

• With sustainable investments, foundations can align their investments with their mission and contribute to the foundation's purpose and outreach.

• Foundations avoid reputational risks that can arise from investing in ethically controversial companies and sectors.

• The inclusion of ESG criteria as a part of a foundation's investment strategy also reduces the financial risk. This offers the potential for more stable returns, which in turn can attract new partners and donors.

More than 70 AIA component foundations' missions generally include financial support to students, outreach to the community, and environmental preservation; each component foundations maintains its own investments. As the first bullet point above indicates, if all these foundations made a commitment to sustainable investments (i.e., ESG), these foundations would be in alignment with AIA national, creating a unified statement to its members, and to the communities they serve.

Current AIA actionable strategies

• AIA national: Adopted ESG strategies for its investment portfolio.

• AIA Foundation: In the process of determining feasibility of ESG criteria for its investments.

• AIA Trust: Considering ESG as a factor in evaluating services.

• AIA College of Fellows: Considering whether to use ESG for its investments.

Suggested AIA actionable strategies

Year 2

• All companies providing services to any AIA entity have an ESG rating.

Year 3.5

• Create a network of AIA Component Foundations (similar to CACE, SLGN) to share information and programs and in support of common agendas, including ESG.

• Reach out to AIA architectural partners and suggest they adopt ESG investment policies; and/or investigate that AIA partners and collaborators subscribe to this value.

• Create a tools that include an ESG checklist to encourage components, firms, and individual members to support ESG investments and insurance services. For example, a pledge, similar to the 2030 Commitment could be considered.
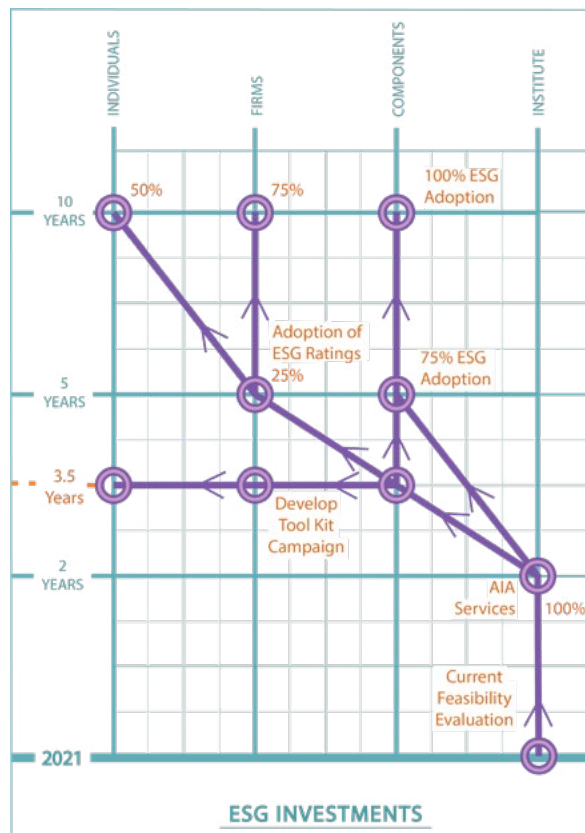
Year 5

• 75% of AIA components have adopted ESG criteria in all investments.

• 25% of firms include ESG criteria in all investments.

• Identify and begin to measure ESG impact of AIA "ripple effect."

Year 10

• 100% of AIA components adopt ESG criteria.

• 75% of firms adopt ESG criteria.

• 50% of AIA members adopt ESG criteria.

Roadmap

Conclusion

Climate change is having a profound effect on the profession and, in turn, the effect architects have on the built environment. By working from the inside out, using ESG as a basis, AIA may have a vast impact on the creation of a sustainable future.

Public architects

Use alternative career paths to impact climate action.

Challenge

All architects, not only AIA members, need to be engaged in the full integration of climate-responsive solutions to measurably impact the challenges of climate mitigation and adaptation in the built environment. Active engagement of architects in alternative careers is essential in achieving that goal.
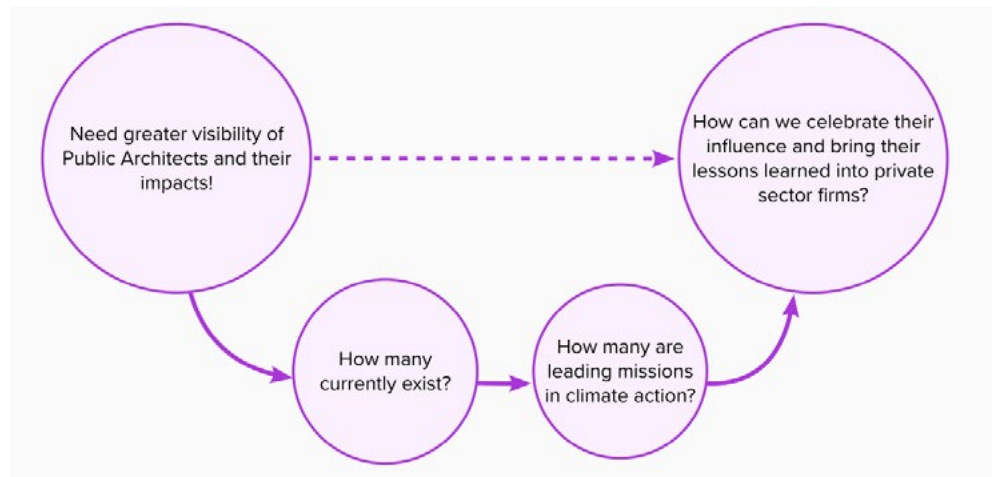
Premise

Engage public architects in driving the profession's transformation of the built environment when discussing climate change. In their own words, government architects bring a lot to the table and can have considerable influence in how government entities address climate action. They describe themselves as:

- Outside-the-box thinkers.

- Altruistic. (And we consistently aim higher.)

- Natural-born project managers.

- Thriving on research and development.

- Embodying engineering, mathematics, and pragmatic solutions.

Background

There is a legacy of leadership by architects in federal, state, and local government, the military, academia, and industry. The significance of architecture to great nations is indisputable, and the United States is no exception. Following the Compromise of 1790 among Thomas Jefferson, James Madison, and Alexander Hamilton, Congress passed the Residence Act that same year, giving authority to President Washington to select the site of the capital. After this, the first Architect of the Capitol was selected in a major competition to design the White House. The rest is history, as notable architects were commissioned to design the first generation of great federal

buildings to serve the young nation through the 19th century. Supervised by Ammi Burnham Young, the first supervising architect of the US Treasury Department, the designs of the initial federal portfolio using in-house staff were developed

From the late 19th century to the present, the huge and significant portfolio of federal architecture was commissioned by strict competitive selection of consulting architects who designed notable and lasting public works. The internationally recognized design excellence programs developed and led by qualified architects in the federal agencies, particularly the General Services Administration (GSA), in the 20th century during and after the Great Depression, set a gold standard for the value of architects in government, emulated by the military, state and local jurisdictions through civil service, consulting programs, and, in some limited cases, appointment by statute.

According to the Bureau of Labor Statistics, architects make up 0.1% of the total workforce in the United States. Nationally, 12% of the federal service workforce has an architect designation, and in state governments, 24% of the combined workforce are architects, with 63% workforce representation in local governments. In California alone, roughly 4,147 architects are employed by local government, and only a handful are AIA members.

Similarly, AIA confidential membership records on the number of public architect members are inconclusive based on reporting and job designations; however, in 2019, less than 2% (or 1,917) of the 95,839 members identify as "government" across the membership categories . Those public architects represent a huge amount of capital expenditures and the built environment.

Definition

A "public architect" is an architect who does not work in a private sector firm or office. A public architect embraces multiple sectors, including the military, governmental, construction, institutional, following alternative career paths. Their most influential areas of responsibility are:

- Development and management of capital expenditure budgets for building construction programs. In California alone, licensed architectural professionals have oversight authority over nearly $12 billion annual capital budgets across the state. Multiply that by 50 states plus the GSA's authority over approximately $68 billion in annual contracts; it's clear that the financial influence of public architects is enormous.

- Maintenance and upkeep of millions of square feet of floor area. GSA alone owns and leases over 376.9 million square feet of space in 9,600 buildings in more than 2,200 communities in all 50 states and six territories. Recently GSA announced its commitment to 100% renewable electricity sources for the federal real estate portfolio by 2025, and by leveraging its purchasing power, GSA will provide renewable energy to 186 million square feet, reducing its carbon footprint. Multiplying this across state and local public service buildings can result in many more square feet that potentially will be positively impacted by climate action.

- Participation in the development and review of building codes, regulations, and standards. Although many states mandate specific codes, much code work is done on the local level where public architects can contribute, influencing sustainability, resilience, and energy efficiencies while coordinating building inspection programs and implementing policies and programs.

- The request for proposals and qualification-based selection process are generally managed by a public architect, along with preparing programs and specifications for new buildings or renovation projects; selecting and overseeing the work of architectural firms contracted to prepare designs and specifications for building projects; reviewing and approving designs prepared by private sector architects for "critical" buildings such as schools, police stations, fire stations, and/or hospitals; and ultimately controlling permit approvals and influencing what gets built and how.

Suggested AIA actionable strategies

Year 2

- Embrace alternative career paths within the architecture profession. This also helps realize the important AIA goal to be inclusive, equitable, and diverse.

- Charge the AIA Strategic Council to explore the public sector architect area and how AIA can support alternative career paths while exploring critical labor issues and the topic of labor unions.

- Develop a strategy to explain to non-AIA member public architects the value and the advantages of being a member of AIA.

Year 3.5

- Highlight public architects as AIA does with private sector architects. Public architects are not in competition with private sector architects and should be seen as equal partners.

- Develop and offer a four- to six-week bootcamp on leadership, climate action, design thinking strategies, and more within the public sector for public architects.

- Empower public sector architects by creating a shared network of successful climate action programs, similar to the State and Local Government Network.
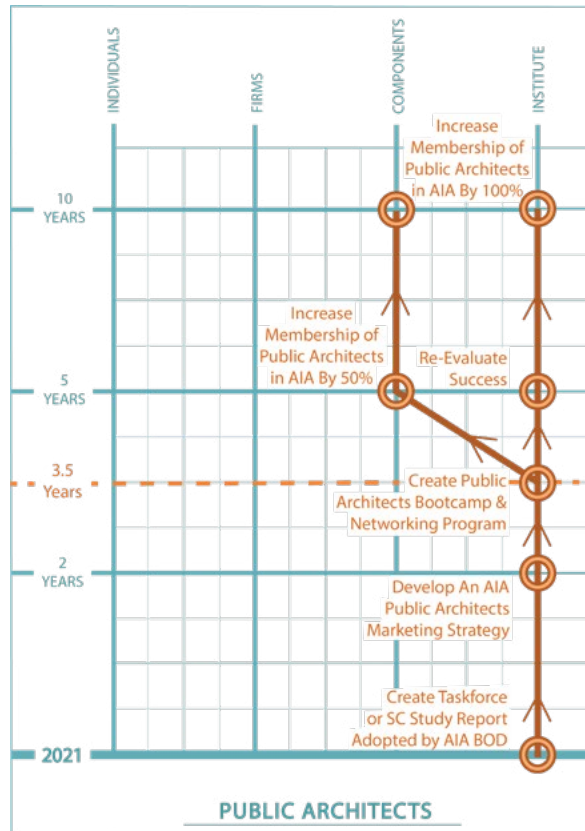
Year 5

- Increase public architect membership by 50% from today's baseline of about 2% percent of total membership—from approximately 2,000 members to 3,000 members.

Year 10

- Increase public architect membership by 100% from the previous five years to reach 6,000 members.

Roadmap

The roadmap diagram shows four vertical tracks labeled INDIVIDUALS, FIRMS, COMPONENTS, and INSTITUTE, plotted against a timeline from 2021 at the bottom up through 2, 3.5, 5, and 10 YEARS.

- 2021: Create Taskforce for SC Study Report Adopted by AIA BOD
- 2 YEARS: Develop An AIA Public Architects Marketing Strategy
- 3.5 Years: Create Public Architects Bootcamp & Networking Program
- 5 YEARS: Increase Membership of Public Architects in AIA By 50%; Re-Evaluate Success
- 10 YEARS: Increase Membership of Public Architects in AIA By 100%

PUBLIC ARCHITECTS

Conclusion

Climate change is having a profound effect on the profession and, in turn, the effect architects have on the built environment. By working with architects in the public sector within its own membership, AIA can have a profound effect on the prospects for a sustainable future.

Ethics and contracts

Use the full force of AIA's standards.

Challenge

AIA possesses powerful resources for achieving measurable success on its Climate Action Plan. The AIA Code of Ethics and Professional Conduct ("the Code") and the AIA Contract Documents are core components of a successful architectural practice in the U.S. Aligning our ethical standards and contractual agreements with our stated sustainable design values is fundamental to demonstrating the profession's engagement with our stated goals.

Premise

The Code and Contract Document resources can play a stronger role in the commitment to sustainable design and architecture for both members and nonmembers. The Code can be better aligned with and strengthen AIA's commitment to climate action. AIA Contract Documents can be a powerful resource in achieving the goals for sustainable project design and construction. The contract offerings can encompass a wide variety of project sizes, types, and delivery methods.

Background: Code of Ethics and Professional Conduct

The Code is organized into three sections: Canons (Broad Principles), Ethical Standards (Aspirations in Professional Practice and Behavior), and Rules of Conduct (Mandatory Rules). In Canon II, Obligations to the Public, and Canon VI, Obligations to the Environment, issues of sustainable design and development were adopted in 2018, led by the National Ethics Council in concert with a steering committee from AIA New England's Committee on the Environment.

In Canon II, Ethical Standard 2.4 was added and reads, "Environmental Equity and Justice: Members should promote fairness and safety in providing professional services and make reasonable efforts to advise their clients and employers of their obligations to the environment, including: access to clean air, water, sunlight and energy for all; sustainable production, extraction, transportation, and consumption practices; a built environment that equitably supports human health and well-being and is resistant to climate change; and restoring degraded or depleted natural resources." Rule 2.401 of Canon II reads, "when performing professional services, members shall make reasonable efforts to inform their clients of the potential environmental impacts or consequences the member reasonably believes may occur as a result of work performed on behalf of the clients."

> *"The Code of Ethics appears to stand in stark contrast to the current AIA.org statement 'Where Architects Stand: A Statement of Our Values' and the 2019 AIA statement 'Where We Stand: Climate Action.'"*

Canon VI was essentially rewritten with more objective and more measurable language that avoided the word "sustainability" altogether. The values are present even if the rules are not.

The five ethical standards, E.S. 6.1 through E.S. 6.5, address energy conservation, water use, building materials, ecosystems, and climate change. It is this Group's

opinion that Rule 6.501 is the weakest statement in the Canon: "Members shall consider with their clients the environmental effects of their project decisions."

The Code appears to stand in stark contrast to the current AIA.org statement "Where Architects Stand: A Statement of Our Values" and the 2019 AIA statement "Where We Stand: Climate Action." Both of these value statements call for an engaged call to action for architects on issues of climate change.
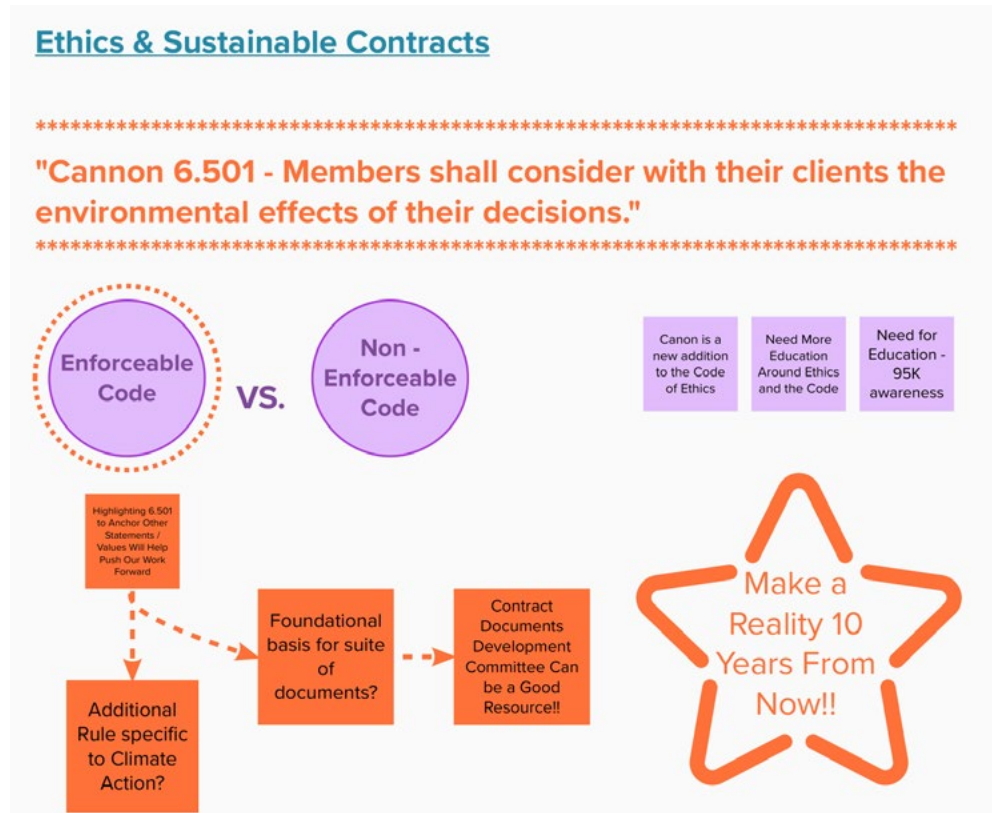

AIA Contract Documents

In 2007 AIA recognized the impact of sustainability in the design and construction fields and subsequently adopted a range of position statements advocating for the sustainable use of earth's resources. Over the next 10 years, AIA Contract Documents implemented basic sustainability references and requirements in some agreements that required the architect to discuss environmentally responsible design approaches with the owner. By 2013, there was a full family of sustainable project branded AIA Contract Documents that were available until 2018 when AIA discontinued most of these documents and subsequently developed E204 2017, "Sustainable Project Exhibit." E204 is not a stand-alone document but is intended to be used with executed owner-architect and owner-contractor agreements that contain a sustainable objective. And in May 2020, AIA released C204-2020, "Consultant's Services: Sustainable Project Services," to be used in situations where an owner hires a consultant who specializes in sustainability.

Current AIA actionable strategies

- In recent years, AIA has issued several value statements on climate action.

- COTE (Committee on the Environment) and CCADE (Committee on Climate Action and Design Excellence) continue to elevate climate action as a priority.

- The AIA Climate Action Plan was approved by the AIA Board of Directors in April 2020.

Roadmap

ETHICS & SUSTAINABLE DOCUMENTS
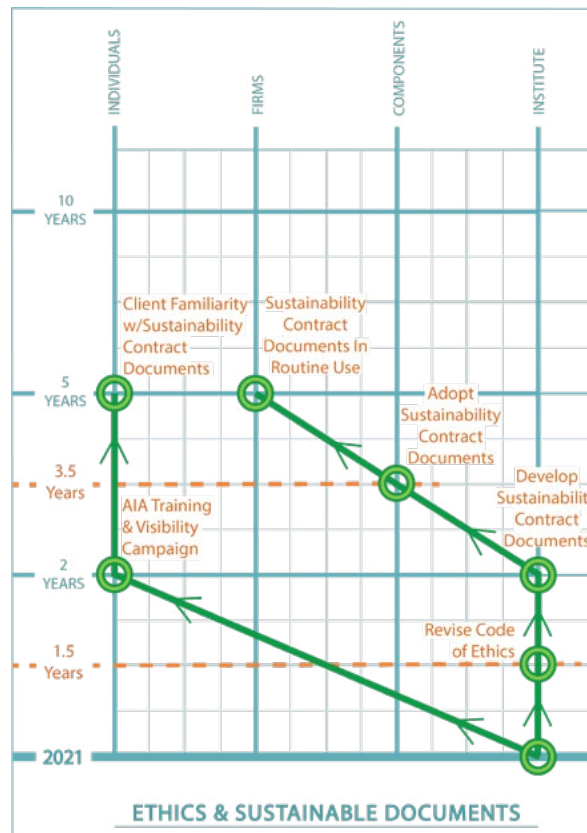
Suggested AIA actionable strategies: Code of Ethics

Year 1

- Consider appointment of an Ethics and Sustainable Development Commission based on the Royal Institute of British Architects'(RIBA) model "To engage membership to assert the fundamental importance of public interest, social purpose, and sustainability as core values within the profession."

- Strengthen Canon VI of the Code. While there are legal considerations for enforcement of the Code, perhaps the moral importance of our responsibility to a global threat such as climate change could allow us to take a stronger stance. This type of evolved thinking is similar to what has occurred with voting rights and civil rights issues.

- Seek transparency and communication between the various AIA groups working on issues regarding climate change.

Year 2

- Expand the ethical standards of the Code to include all 10 of the defining design principles found in the Framework for Design Excellence: Integration, Equitable Communities, Ecosystems, Water, Economy, Energy, Well-Being, Resources, Change, and Discovery.

- Develop a strategic alignment with RIBA to blend the RIBA Sustainable Outcome Guide with the AIA Framework for Design Excellence.

- Improve outward messaging to the public regarding our climate aspirations.

Year 3

- Create proactive messaging and training so that architects are aware of the Code's mandatory requirements and the opportunity it provides for client engagement. Many AIA members are only vaguely aware of their ethical obligations as members; if they do not know about them, much of our efforts and initiatives are lost.

AIA Contract Documents

Year 1

- Charge the AIA Contract Documents Committee to review the contracts' alignment with the AIA Climate Action Plan.

Year 2

- Provide professional practice resource briefs for academic classes (secondary and college architecture programs) about the architect's ethical role in design and sustainability.

Year 3

- Facilitate and actively promote the routine use of post-occupancy evaluations with open reporting of outcomes and sharing of standardized data.

- Revive and update the "family" of Sustainable Project Contract Documents.

Year 5

- Develop contract briefs and information documents outlining the ethical and contractual relationship of architects and sustainable projects.

Conclusion

Climate change is having a profound effect on the profession and, in turn, the effect architects have on the built environment. By committing to a strong ethical code reinforced by AIA Contract Documents resources and education, AIA can become a respected leader in a global sustainable future.

Government action

Accelerate funding and legislative/regulatory drivers.

Challenge

The transformation of the built environment to meet net zero emissions targets and climate adaptation can't depend solely on marketplace drivers. The role of the government is critical to provide both "carrots"—financial support and other incentives—and "sticks"—regulations and legislation—so all design and construction practices meet the urgent timelines. The need to reverse our carbon impact can't wait.
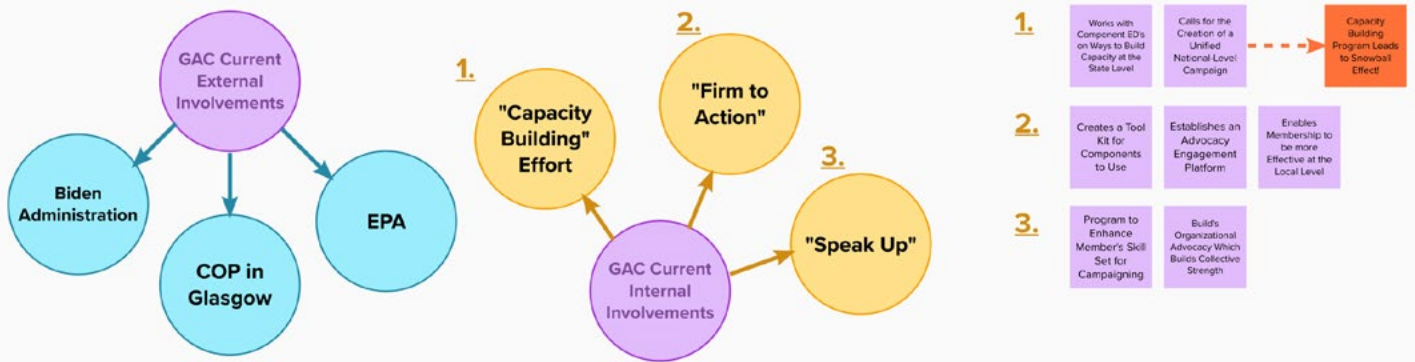
Background

The conditions for effective climate action are ripe at the federal level; pending legislation and regulations include incentives and requirements for an equitable clean energy transformation, deep energy efficiency upgrades, and climate adaptive solutions. Some states and cities have initiated energy efficiency, renewable energy, benchmarking, and resilience requirements. However, conditions contributing to climate change can change quickly given the potential rapid shift in the legislative landscape. Nor can we expect to achieve the necessary scale of transformation if action is taken only at the regional level. We need to lay the groundwork for long-lasting change that will drive the necessary transformation.

Premise

Advocacy: Proposed legislation and regulations at the federal and some state/local levels would be major long-term accelerators of climate action in the built environment. This includes the recent White House announcement for the decarbonization of the built environment an accelerator for public-private funding, and California's push for electrification. The Group proposes that AIA should empower its full network to support these initiatives while there is momentum and expand activity across the country. Our trusted voice is needed at the table to counter lobbying efforts by opposing groups.

Creating briefing books backed by substantive AIA-based research and talking points would be a critical tool to empower architects as advocates.

Regulation/Legislation: One way to achieve our catalytic goal is through a combination of requirements and incentives for states to drive clean energy transformation and resilient design. We should build on successful state efforts that are integrating climate responsive and resilient design. Two stellar example are the Green Communities Act and the Municipal Vulnerable Preparedness Act in Massachusetts, which are transforming municipal buildings through a combination of requirements and financial incentives funded through the regional greenhouse gas emissions program.

These initiatives should incorporate a "stretch" building code that requires maximum energy efficiency and a transition to decarbonization. We propose accelerating the timeline for code and standards changes offered in the 2018 report *Disruption, Evolution, and Change: AIA's vision for the future of design and construction by the Blue Ribbon Panel for Codes and Standards*. This work must also incorporate aggressive policy measures that address improvements of the existing building stock. We should work quickly to build on the federal government's role in driving change along with the new Federal Building Performance Standards requirement. In collaboration with the other key stakeholders outlined in the Blue Ribbon Panel report, we would work toward code and policy adoption by all states over time using federal levers such as those that led to the establishment of a nationwide seat belt requirement. We should also build on the Blue Ribbon Panel's recommendation to promote architects as primary stewards of code compliance.

By promoting a national building code and existing building policies, architects can drive a climate-responsive built environment that that would have a major "snowball effect."

Research: AIA-branded research is needed to achieve our goals. AIA, in collaboration with others, can undertake research that analyzes the measurable benefits from a resilient, sustainable, and climate-responsive built environment, looking at cost, emissions, equity, resilience, and health/wellness factors. This could be done in collaboration with key research partners and engage members in identifying case studies and other resources. This research would serve as the foundation for briefing books for architects to use with their clients and in their local, regional, and federal advocacy, based on the recent AIA payback literature review. AIA can also conduct a scan of statewide initiatives, like those in Massachusetts, that are successfully driving change to share across our network. This information could be promoted with key stakeholders and influencers to develop legislative and regulatory priorities.

The Upjohn Research Initiative funding could be used to do this work. These goals should be a priority in the updating of AIA's research agenda in 2021.

Current AIA actionable strategies

- AIA issued a comprehensive call to action in 2018 with the report Disruption, Evolution, and Change: AIA's vision for the future of design and construction.

- The AIA Advocacy network is expanding advocacy capacity building and ability to act at all levels across the U.S.
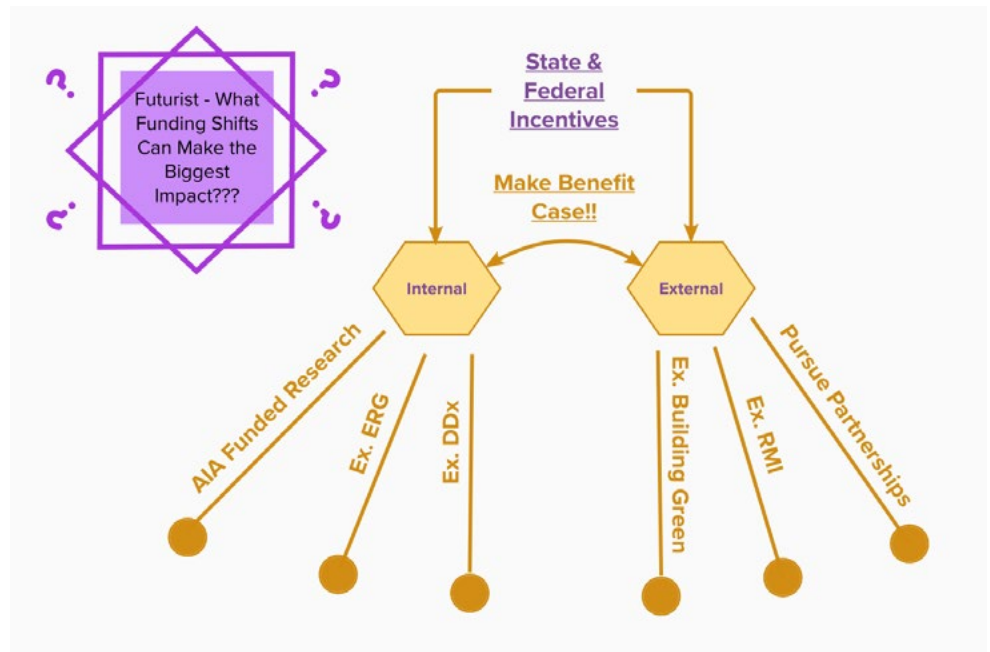
- The Government Advocacy Committee and AIA staff are laser-focused on promoting federal-level climate-friendly laws and regulations.

- The AIA Codes & Standards Committee is focused on how best to address AIA's goals with the recent International Code Council changes.

- AIA is directly engaged in the development and promotion of the Zero Carbon Codes.

- Initial research is underway on the business case for sustainability.

- Some AIA state components and regional leaders are promoting Zero Carbon Code, benchmarking, deep energy retrofits, electrification, and other climate-responsive programs.

Suggested AIA actionable strategies: Research

Year 1

- Document the current state of codes and state/local clean energy, existing buildings benchmarking and resilience regulation and legislation.

- Undertake AIA-branded research that makes the business case for climate action. Include impacts on equity, job creation, health and wellness, and community resilience.
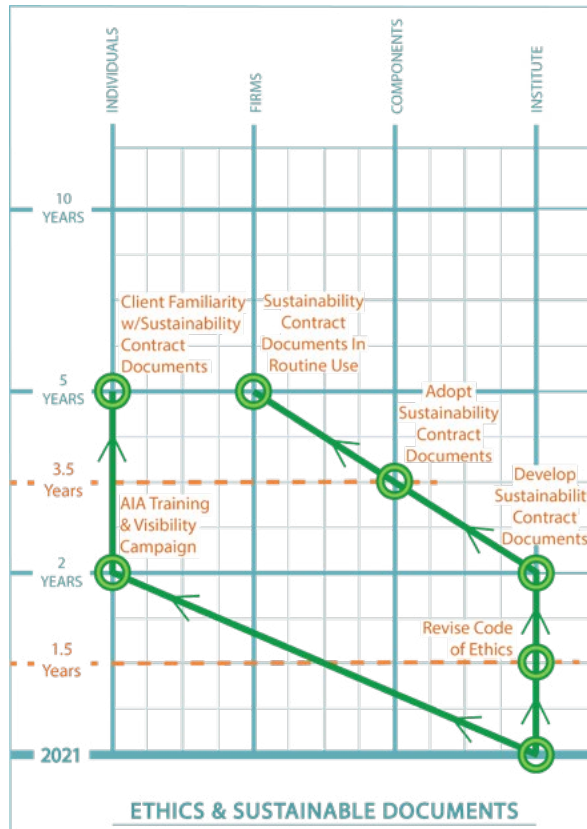
- Develop case studies.

Year 2

- Complete AIA initial research and issue training/toolkit materials.

- Identify next-level research goals and funding strategies.

Year 5

- Continue research prioritization.

- Improve training/advocacy materials based on research.

Roadmap

ETHICS & SUSTAINABLE DOCUMENTS

Code and regulatory language

Year 1

- Determine AIA's role in developing legislative/regulatory priorities for incentivizing decarbonization/resilience.

- Promote development of an enhanced national code strategy and existing building policies.

- Identify high-performance building standards for advocacy.

Year 2

- Develop a strategy for enhanced code implementation in early adopter states.

- Implement high-performance building standards through member engagement.

- Participate in legislative/regulatory priorities for state adoption.

- Promote architects as code experts and reviewers.

Year 5

- Continue state adoption of enhanced code and policies.

- Expand high-performance building standard to all practices.

- Implement legislative/regulatory incentives.

- Expand efforts to promote architects as code experts.

Year 10

- Establish nationwide implementation of enhanced code and policies.

Advocacy

Year 1

- Initiate a major advocacy initiative focused on federal regulatory and legislative agendas promoting decarbonization of buildings and related systems, focused initially on single family and multifamily housing.

Year 2

- Develop long-term AIA advocacy strategy around codes, policies, and regional/federal prioritization.

- Continue federal and regional advocacy for decarbonization.

- Engage the full strength of AIA membership in advocacy

- Collaborate for adoption of state codes.

- Train architects to advocate for legislation implementation.

- Train architects to promote code adoption.

Year 5–10

- Continue architect training and advocacy.

- Continue to focus on enhanced codes and legislation.

Conclusion

Passage of major legislation and regulations, including a national building energy code, to decarbonize the built environment and address resilience while providing needed funding would have a long-term impact on the way that all architects practice in the U.S. We see AIA has a unique opportunity to help create and advocate for these catalytic changes.

Professional liability

Adapt standards of care to face a changing climate.

Challenge

Architects are legally obligated to meet the standard of care requirements in their work. But that definition is constantly changing based on current conditions and interpretations. There is potential for professional liability insurance to act as a driver in the profession's transformation of the built environment to mitigate and adapt to the impacts of climate change.

Premise

When maps and codes have yet to catch up with the new reality of climate change, what are a design professional's obligations? Can a changing definition of "standard of care" for design professional and architectural liability be an impetus to drive change in the profession? Changes to the standard of care and the threat of legal claims of negligence can drive the profession's transformation of the built environment. These changes would be consistent with AIA's value statements and some insurance companies' findings:

- Architects should incorporate adaptation strategies with their clients (AIA Code of Ethics).

- We stand for a sustainable future (AIA 2020 Climate Action Plan).

- We stand for protecting communities from the impact of climate change (AIA 2020 Climate Action Plan).

- The professional liability industry is recognizing the importance of climate change in evolving the standard of care order to meet professional liability standards.

STANDARD OF CARE DEFINES *LIABILITY* !
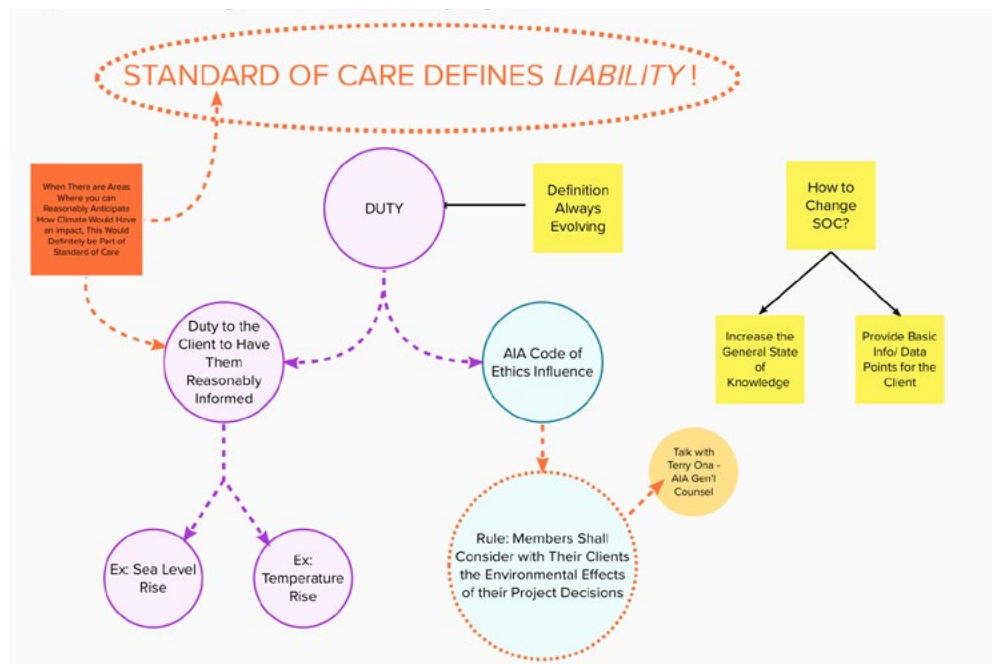
Background

Canon VI of the AIA Code of Ethics and Professional Conduct states that members have "obligations to the environment." In particular E.S. 6.5 – Climate Change, states that "Members should incorporate adaption strategies with their clients to anticipate extreme weather events and minimize adverse effects on the environment, economy, and public health."

While the impacts of climate change and their severity vary geographically, mitigation efforts have been limited and largely voluntary and reflect a wide range of political, economic, fiscal, and social justice goals. There is an emerging but limited assortment of regulatory and statutory requirements that claim to address climate adaptation, but none of these requirements have brought about noticeable change in planning, engineering, land use, design, or development practices.
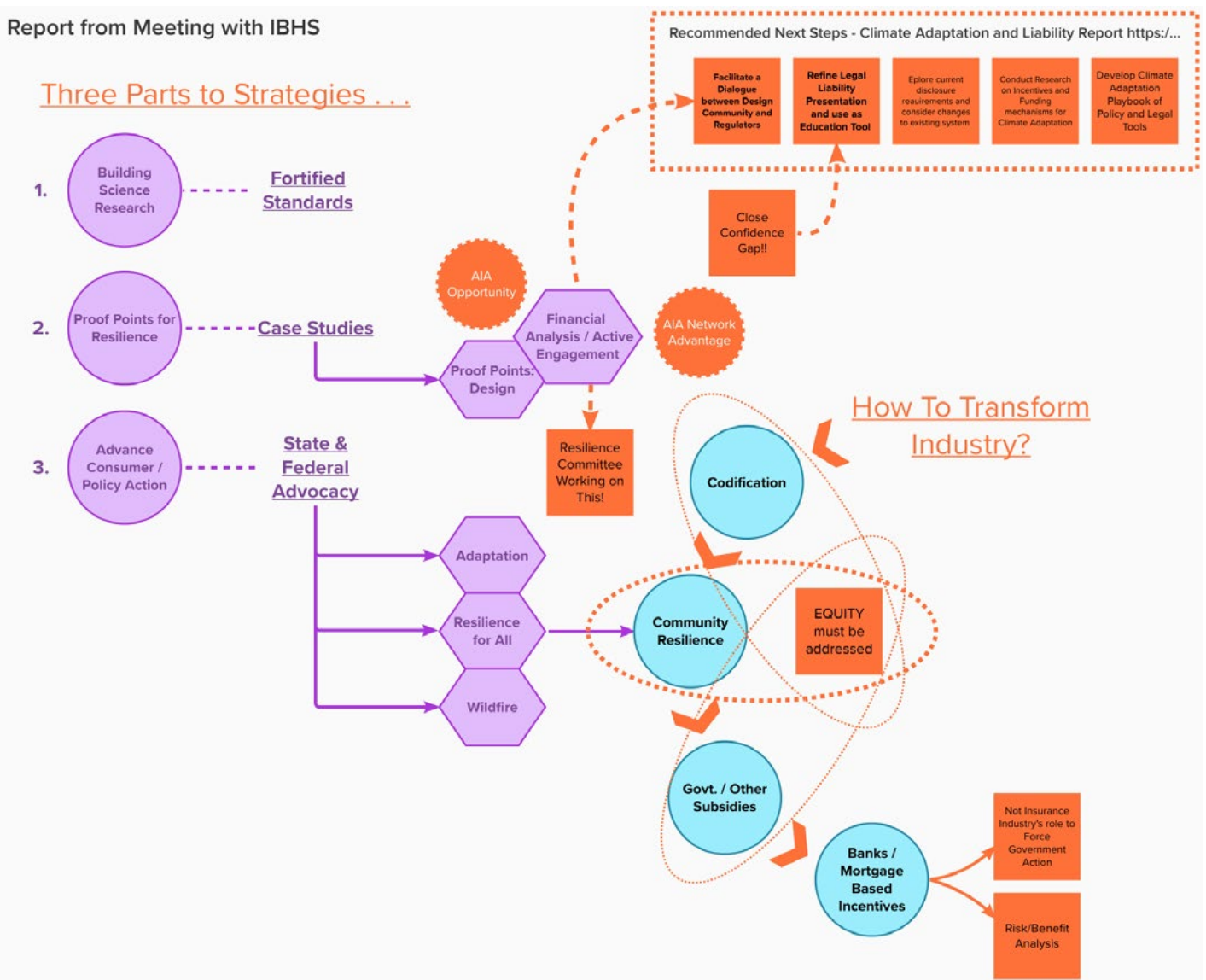
The prevailing practice, even for most critical infrastructure, is to design and build according to the climate patterns of the past rather than those observed in the present or anticipated imminently. This has significant implications for public health and safety, the integrity of communities at risk, and the resilience of our economy to extreme and catastrophic weather. The omission of climate risk in prevailing practices, and the omission of explicit standards for climate risk in extant laws and regulations, are relevant to, but not dispositive of, the legal responsibility for harm that may result from failure to act reasonably in the face of ascertainable climate risk. Statutes and rules often impose general duties to reduce risk and take reasonable precautions, and these obligations can be heightened when considerations of public health or safety are implicated.

Current AIA actionable strategies

- The AIA Trust has an easy-to-use Professional Liability Insurance Database directory of curated professional liability insurers. This includes guidance on selection criteria and broker information.

- All AIA members receive access to newsletters, training, and other messages from liability insurers.

Roadmap

LIABILITY INSURANCE

Suggested AIA actionable strategies

Year 1

- Coordinate with the AIA Trust to build an alliance with architectural liability insurance carriers.

Year 2

- With architectural liability insurance carriers, develop liability training specifically related to the standard of care and implications of practicing architecture during increasing climate change.

- Support "Green Bank" funding for adaptation and mitigation design solutions and make connections to standard of care.

Year 5

- With the involvement of CACE (Council of Architectural Component Executives), work comprehensively with federal, state, and local jurisdictions to create explicit standards for climate risk in building laws and regulations.

- Work with NCARB and other architectural exam and licensing bodies to include a climate action standard of care as an element in becoming licensed.

Year 10

- A climate action standard of care requirement becomes part of membership.

- Bank and government funding of green, sustainable, and resilient building projects is tied to meeting a certain standard of care related to climate change.

Conclusion

There are many ways to influence the practice of architecture as it relates to climate change, but altering the standard of care to meet the needs of the future could help AIA architects provide superior services, remain leaders on the cutting edge, remain relevant in a changing business environment, and be recognized as a profession finding the balance between humans and nature.