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# The Climate Imperative

## Overview

Humanity is faced with a challenge unlike any we have previously encountered: we must take urgent action to reverse the impacts of our greenhouse gas emissions, protect our planet, and preserve life as we know it.

Climate change affects every person, every project, and every client. The impacts are all-inclusive, with no respect for borders or boundaries—and are felt first and hardest by our most vulnerable populations. Rising sea levels, extreme weather events, and the degradation of natural resources are a direct result of increased carbon levels, threatening national security, global economies, and the health, safety, and welfare of local communities. Because more than 40% of U.S. greenhouse gases can be attributed to the building industry—during construction, embodied in concrete, metals, and polymers, and through everyday processes such as heating, cooling, and lighting—architects have the ability to lead the change our planet needs. We must take action.

As we launch into the new decade, AIA is prioritizing and supporting urgent climate action to exponentially accelerate the decarbonization of buildings, the building industry, and the built environment by:

- declaring an urgent climate imperative for carbon reduction;
- transforming the day-to-day practice of architects to achieve a zero-carbon, equitable, resilient, and healthy built environment; and
- leveraging support of all potential partners, including peers, clients, policymakers, and the public.

This represents a dramatic and unprecedented change in AIA's focus, unequalled in its 162-year history, and comes with a unique set of challenges. We need to reach a diverse audience of architects, partners, and clients, whose time and attention are fragmented by busy lives and careers. Our goals will be science-based and implementable in a short timeframe. Our members and clients must bring new skills to the table. By presenting the opportunities within the climate crisis, both for the world and the bottom line, we can chart a course for positive change with a role for each person.

We cannot address these challenges alone. We must learn from others' research and integrate diverse expertise into our collective growth. Public health professionals, insurers, supply chain analysts, and so many others have expertise that complements that of architects, and their work informs design solutions. We can use climate action as an opportunity to leverage these solutions in the creation

of beautiful, joyful, regenerative, and inspiring places.

To succeed, we must talk about climate action in a way that sounds, looks, and feels relatable. In terms our members will immediately understand, this is:

*One site.*

*Countless challenges.*

*A looming deadline.*

*Seven and a half billion clients.*

*This is the ultimate design project.*

*This is why we're here.*

*It's time to show what design can do. The biggest design organization in the world is taking on the biggest design problem in the world.*

*AIA and its members are dedicated to designing a sustainable, healthy, and equitable world—together.*

By tackling the sources of climate change, preparing for future impacts, and making the built environment adaptable and resilient, AIA is determined and committed to building a better future for all. We call on every architect and every individual around the world to support humanity's collective call and take action through an unrelenting commitment to build a better world—for us and for generations to come.

### **Beyond the imperative**

Climate action is not only an imperative—it is an opportunity. Similar to the space race more than 50 years ago, where the challenge of getting to the moon unleashed innumerable innovations and creative solutions, the climate crisis presents an opportunity to innovate and transform in ways that benefit life on earth. Advancing solutions that mitigate and prepare for the effects of climate change will preserve our ability to live healthy and profitable lives, help prevent climate gentrification, and protect homes and businesses from potentially devastating property damage, loss, and devaluation.

While widespread work is already underway, there is still so much more to be done. The transformation of the built environment will not take place without the global expertise, innovation, and diversity of partners and collaborators from both within and outside the architectural industry. Manufacturers, contractors, engineers, planners, landscape architects, professional organizations, developers, investors, owners, financial institutions, the insurance industry, policymakers, nonprofits, philanthropic organizations, real estate professionals, building occupants, and many others all have a voice that can strengthen our impact.

The changes needed in our industry are pervasive and must include a holistic approach to create immediate and long-lasting solutions. AIA commits to serving as a dedicated and reliable partner—to members, member firms, and components seeking to identify and accomplish their own climate actions, to clients making investment and risk management decisions, and to groups around the world working on climate solutions. Working together, we will be more knowledgeable, influential, and effective in our communities, in our practice, and in our lives. Together, we will achieve more.

# AIA Climate Action Plan

Decisions made in design and construction have lasting effects and are best made with a long-term perspective; this means projects that withstand the impacts of climate change, mitigate risk, and protect and enhance our existing resources.

The justification and opportunity for implementing climate action strategies exists in every project. Solutions with meaningful and viable returns on investment can—and do—work. Zero-carbon, high-performance buildings provide ongoing operational savings and risk mitigation, and the quickening pace of climate change is only accelerating the return on investment. Every day, new financing mechanisms, collaborations, and partnerships are supporting projects and solutions that create a more valuable, efficient, and resilient built environment. Architects can exponentially increase this value by weaving climate action activities throughout the work we do.

AIA's Climate Action Plan reiterates our dedication and commitment to designing a sustainable, healthy, and equitable world. We will measure our success holistically, using the “triple bottom line” to assess the outcomes of our work—the impacts on humans, the economy, and the environment.

## Goals

### Climate action goals

To prioritize and support the exponential deceleration of greenhouse gas production, make progress towards achieving zero CO<sub>2</sub> emissions in the building sector by 2040, and reduce vulnerability to climate change impacts, AIA is focusing efforts on three overarching goals to address the sources of climate change, adapt to the impacts of climate change, and to lead and transform the architectural industry:

#### **1. Mitigating the sources Establish the relevance and importance of the building sector and architectural practice in climate mitigation solutions.**

By actively addressing the building industry's footprint as a primary contributing source of operational and embodied carbon, architects must play a major role in catalyzing the industry by advancing zero-carbon projects, products, policies, initiatives, research, and education. Our strategies to achieve our first goal include the following:

- Create and distribute data through research, case studies, and powerful, data-driven storytelling to show how the building design can positively contribute to climate solutions.
- Educate and empower current and emerging architecture professionals to drastically reduce operational and embodied carbon in new and existing buildings.
- Recognize and celebrate projects, firms, and individuals for practice that supports climate action.
- Shape policies and regulations to require and incentivize significant reductions in operational and embodied carbon.
- Activate communities to achieve decarbonization goals.

**2. Adapting to the impacts Design buildings and communities to anticipate and adapt to the evolving challenge of climate change.** By addressing the impacts of climate change in every design solution, our spaces, buildings, structures, and communities become more functional and high performing. Every project we build and retrofit is our opportunity to evaluate vulnerabilities, choose resilience, mitigate risk, incorporate equity, improve occupant health, serve our clients' needs, and further the research, evidence, and business case for climate action. Our strategies to achieve our second goal include the following:

- Educate and train members in the evolving impacts of climate change on the built environment and architects' role in reducing vulnerability, risk, and consequences.
- Develop resources and research to support the architects' role in reducing climate risk, consequence, and vulnerability, and demonstrate how every project and client can contribute to climate action.
- Demonstrate the connection between ambitious climate action, economic growth, and sustainable development.
- Develop and champion policy recommendations that promote climate-sensitive design and adaptation for all new and existing buildings and communities.
- Provide the vision and expertise to assist communities as they transition out of high-risk areas and create resilient and equitable places.

**3. Catalyzing architects to act Lead meaningful change and contribute to climate solutions in partnership with our global community.** The challenges around embodied carbon and existing buildings, new building design, renewable energy, and electrification go hand-in-hand with opportunities. While architects are positioned to lead transformation in the building industry, we cannot do this alone. We must commit, engage, lead by example, and work collaboratively with our extensive partner network to holistically affect the magnitude of change we are driving towards. Our strategies to achieve our third goal include the following:

- Educate AIA members on the opportunity of embodied carbon in existing buildings, new building design, renewable energy, and electrification, to equip them with the tools needed to address changing societal needs.
- Develop and implement a plan to engage and empower all AIA members to transform architectural practice for climate action.
- Influence and communicate the value of design and its impacts on all communities.
- Develop and communicate a comprehensive climate action advocacy agenda.
- Partner and align efforts with global climate action allies to accelerate our outcomes.
- Educate and energize the next generation of architects through practice, mentoring, research, and architectural education.

A comprehensive list of AIA's Climate Action Plan potential strategies and tasks, by goal, can be found in the Appendices.

## Priorities

### **Top priorities for 2020**

AIA is taking a broad approach to climate action, intentionally including a myriad of topics within this work to address the holistic nature of design and to engage members, clients, and the general public in the areas and topics that most inspire and connect with their passion and business. While the work is urgent, it does not have to be overwhelming. As we step into 2020, we have identified the most pressing and significant actions to give us focus, clarity, and a place to start. Our immediate and short-term priorities are as follows:

#### **Architectural Practice**

- Change business as usual by turning the Framework for Design Excellence into standard practice.
- Develop and implement a comprehensive strategy to redefine health, safety, and welfare to include the comprehensive effects of climate change.
- Develop a comprehensive strategy for adopting the ZERO Code.

#### **Knowledge Sharing**

- Educate and empower AIA members by collecting and sharing research, data, and best practices, providing deep technical education, and reinforcing the business case for climate action.
- Reinstitute required continuing education credits on sustainable design and climate change.

#### **Visibility & Engagement**

- Develop and implement a plan to engage all 95,000 AIA members, helping them understand how every project and client can and must be part of the solution.
- Work with AIA member firms and components to roll out an advocacy program that advances climate action in the built environment, moving towards the adoption of the ZERO Code in all states and cities.

### **The role of architects**

Architects are positioned to help eliminate and reverse the causes of climate change through the buildings we design and renew. Our approach embraces regenerative design processes, with a focus on creating a net-positive impact on the environment, people, communities, and the economy. Far beyond needing a “less bad” approach, we must instead find a way for buildings to actively create good; a regenerative built environment seeks to integrate and improve the surrounding natural environment through innovative strategies and technologies.

Our priorities are based on the framework developed in AIA’s 2013 Sustainability Leadership Opportunity Scan, which assessed the impact of the design and construction industry and identified four priority areas that are essential to the role of architects: Energy, Materials, Design and Health, and Resilience. Within each of these priority areas, we have identified the most powerful climate action opportunities architects can incorporate into their practice to create impact and contribute through design.

**Energy: Buildings must use and produce only clean energy.**

- Use climate-responsive design on all projects.
- Specify high-performance, long-lasting envelopes and systems.
- Move buildings to clean-sourced all-electric, incorporating building-integrated renewable energy.
- Move to islandable microgrid connections, potentially at the neighborhood scale.

**Materials: Buildings must sequester carbon.**

- Re-use buildings and building materials first before recycling.
- Address building life cycles through cradle-to-cradle resource use.
- Practice embodied carbon design on all projects.
- Evaluate materials on end-of-life reuse, off-gassing, and impacts from natural and man-made disasters.
- Design for adaptability and deconstruction.

**Design and Health: Buildings must be designed to promote health and wellbeing.**

- Design buildings to improve air and water quality.
- Design buildings to promote activity and fitness.
- Design buildings to connect people and nature.
- Design buildings to support mental health and social wellbeing.

**Resilience: Buildings must be resilient and adaptable.**

- Design buildings to be safe and secure.
- Design buildings to survive and recover.
- Design buildings to adapt to future climate conditions.
- Avoid building in highly vulnerable locations.

Each of these priority areas also align with measures in the [AIA's Framework for Design Excellence](#), which was adopted in 2019. The Framework contains best practices, high-impact strategies, case studies, and additional resources can help individuals and firms educate themselves, set climate action goals and targets, and frame conversations with clients and communities.

As architects, our actions must be part of a holistic global climate action and adaptation response. By galvanizing all members, working with our extensive component network, collaborating with industry and academic partners, and engaging civic leaders, elected officials, and influencers at all levels of government, AIA is committed to helping climate action advance through every interaction.