

# Climate Action: Building Decarbonization & Sustainable Design

#### Why Building Decarbonization

#### The Climate Imperative

Today 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 and protect our planet. Rising sea levels, extreme weather events, and the degradation of natural resources are a direct result of human activity, threatening our communities and the health, safety, and welfare of all individuals.

#### The Built Environment

Climate change affects every person, every project, and every client, and the architectural industry is uniquely positioned to act responsibly to address it. Because a third of greenhouse gas emissions can be attributed to the building industry in Washington, architects can and should lead efforts to address the climate impacts of the built environment.

AIA prioritizes and supports urgent climate action to accelerate the decarbonization of buildings, the building industry, and the built environment. We do this by declaring an urgent climate imperative for carbon reduction in the built environment; transforming the day-to-day practice of architects to achieve a zero-carbon, equitable, resilient, and healthy building sector; and using our skills to inform policy debates.

The challenges around decarbonizing new and existing buildings go hand-in-hand with opportunities for designers. Deeply sustainable buildings are a critical part of good design, and architects can lead the way in transforming our built environment to be cleaner, healthier, and an integral part of our climate solution.

#### The AIA Imperative

AIA Seattle's action on climate are guided by AIA National's existing policy framework on climate. AIA National's 2019 resolution, <u>Urgent and Sustained Climate Action</u>, directed AIA members and components to:

- ...[P]rioritize and support urgent climate action as a health, safety, and welfare issue, to exponentially accelerate the "decarbonization" of buildings, the building sector, and the built environment.
- ...[Engage AIA's] full membership; the clients and communities members serve; federal, state and local policy makers and governing bodies; other

professional organizations and affiliates, and the public on climate action through a multi-year strategy for education, practice, advocacy, and outreach.

This resolution built on the work of previous AIA National actions on climate change, including:

- The 2017 AIA Board of Directors document <u>Where We Stand: Climate Change</u> and the AIA <u>Commentary on Climate Change Mitigation</u>, which state the AIA's position on the science of climate change, the substantial greenhouse gas emissions from buildings and cities, and the vital role architects must play in combating climate change.
- The 2018 AIA Board of Directors-adopted revisions to the <u>AIA Code of Ethics</u> <u>and Professional Conduct</u>, fully updating Canon VI, Obligations to the Environment, including:
  - Ethical Standard 6.5: Climate Change. Members should incorporate adaptation strategies with their clients to anticipate extreme weather events and minimize adverse effects on the environment, economy, and public health.
  - Rule 6.501. Members shall consider with their clients the environmental effects of their project decisions.

## AIA Priorities for Decarbonization & Sustainable Design

### GOALS

- Support decarbonization of the built environment by shaping policies and regulations that result in significant reductions in operational and embodied carbon in buildings.
- Build more resilient communities by championing policy recommendations that promote climate-sensitive design and adaptation for all new and existing buildings.
- Advocate for land use policies that minimize the climate impact of buildings and urban development by supporting denser neighborhoods, discouraging single occupancy vehicle trips, and maintaining infrastructure.
- Enable and support member advocacy on climate action on individual projects, in support of public policy, and in the community.

### ACTIONS

#### **Decrease Operational Carbon Emissions**

Accelerate building decarbonization through public policy

- Require highly efficient, all-electric buildings for new construction
- Eliminate fossil fuel use in existing buildings and homes
- Support energy performance benchmarking (city and state)
- Support utilities' transition away from gas
- Champion strong and effective energy codes that mandate highly efficient, net zero carbon for new construction
  - Create consistent, progressive energy codes to achieve <u>2030 Challenge</u> <u>goals</u> (80% reduction from baseline from 2020-2024, 90% reduction from baseline in 2025-2029, Net Zero Energy by 2030)
  - Support efforts to advance more efficient energy codes that restrict the use of fossil fuels (city and state)
  - Via AIA|WA, support the authorization of residential energy reach codes for local jurisdictions (state legislation)
  - Via AIA|WA, support continued funding on and the ongoing authority and independence of the State Building Code Council to develop robust building codes

#### **Reduce Emissions from Embodied Carbon**

- Shape policies and regulations to significantly reduce embodied carbon in the built environment
- Support efforts to incentivize building reuse
- Encourage building deconstruction, salvage and the recycling of building materials in place of demolition
- Incentivize transparency and disclosure of environmental impacts in building material supply chains
- Support efforts to set material-specific embodied carbon performance benchmarks
- Support whole building lifecycle impact benchmarking across projects

#### Promote Incentives for High Performance Buildings

- Drive policies to provide development height and area bonuses for high performance projects
- Advocate for deep green projects to be incentivized with streamlined, expedited, or reduced permitting requirements

#### Support a Just Transition

The impacts of climate change are felt first and strongest by society's most vulnerable populations. Policy solutions must prioritize the frontline communities most affected by climate change, incorporating anti-displacement and community-focused measures, as well as developing a diverse clean energy workforce.

- Support Shift Zero's work on a just transition, including coordination with BIPOC led organizations and groups working toward equitable workforce development
- Support state funding for programs like Weatherization Plus Health that prioritize low-income energy improvements
- Incentivize holistic building decarbonization strategies which promote the development of just, fair, and equitable labor practices within the building industry

• Balance the imperative to decarbonize the built environment with the need to provide healthy, affordable, and dignified buildings for frontline communities most vulnerable to climate change

#### Support Complementary Climate Policies

Support policies with less direct impact to the built environment that reduce or eliminate the use of fossil fuels, including:

- Investments in clean energy
- Investments in mass transit and non-automobile infrastructure
- Investments in climate adaptation strategies
- Support the development of regulated, voluntary carbon markets (i.e., carbon offsets, cap-and- trade) that put a price on carbon emissions
- Prioritize the climate impacts of housing, growth, and transit policies in our work in those areas

## Catalyzing Architects to Act

Architects impact the climate daily through our technical knowledge of sustainable design and our influence on projects. In the realm of public policy, AIA members support our region's progressive stance on energy through technical support, knowledge-sharing, advocacy, and ongoing work in the field. These actions are mandated by AIA National's policies and statements as outlined above, but AIA Seattle and AIA|WA have a strong history of pushing the boundaries of national climate policy based on existing work in the state.

By actively addressing the role of buildings as a significant contributing source of greenhouse gas emissions, architects can play a major role in catalyzing the industry by advancing zero-carbon projects, products, policies, initiatives, research, and education. Ultimately, architects can use their skills to establish the relevance and importance of the building sector and architectural practice in combating climate change and developing pathways to zero carbon buildings through public policy.

#### **Strategies**

- Educate and empower current and emerging architecture professionals to transform architectural practice for climate action by significantly reducing operational and embodied carbon in new and existing buildings
- Identify opportunities for architects to participate in public policy debates and decisions that advance zero carbon buildings
- Educate members about the work of Shift Zero, Washington's zero carbon building alliance and AIA Seattle's top climate partner, and opportunities to participate in Shift Zero's policy efforts as individuals and firms
- Recognize and celebrate projects, firms, and individuals for practice that supports climate action
- Develop and champion policy recommendations that promote climate-sensitive design and adaptation for all new and existing buildings and communities

• Provide education around designing buildings for catastrophic natural events, including wildfire, seismic, and extreme heat events